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# CLIMATE CHANGE AND CONFLICT MANAGEMENT IN NIGERIA: A TICKING TIME BOMB ON SUSTAINABLE DEVELOPMENT

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## Abstract

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*Global warming and climate change is a recurrent and controversial issue in international politics, especially in the study of global environmental politics. It has affected negatively on developed countries but more severe on developing nations where Africa, Asia, Latin America and Caribbean belong. This paper examines climate change as ticking time bomb, as it hinders sustainable development and conflict management in developing nations. This study adopted historical research design; the researcher used secondary types of data gathered from text books, internet prints, journals, newspapers, and libraries. The regime theory propounded by Krasner and Oral. R Young was adopted as a framework. The study made the following findings: climate change is caused by the activities of the industrialized countries; nevertheless, they are not culpable of it. Nigeria and other developing nations has done little or nothing to abate the impacts of global climate change, rather they have just been merely signatories to series of international global treaties on climate change. Also global warming is a neocolonial syndrome and a way to dictate developmental strands for third world countries. The research therefore recommends that there should be mainstreaming climate change into economic frameworks and sectarian policies in order to ensure integrated adaptation responses.*

**KEYWORDS:** *Climate change, global warming, sustainable, development, conflict, environmental scarce resources.*

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## **Introduction**

The issue of global warming has become a recurrent decimal and appeared to be controversial in the study of global environmental politics. According to (Weart, 2008), global warming refers only to the earth's rising surface temperature, while climate change includes warming and the side effects of warming like melting glaciers, heavier rain storms or more frequent drought. Said another way, global warming is one symptom of the much larger problem of human caused climate change. while rooted in the atmospheric sciences, climate change according to (Mayer, 2018), also raises issues of political instability, among others; because in the past half-decade, a growing body of research spanning economics, political science, and ancient and modern history has argued that it can and will; Historians have found temperature or rainfall change implicated in the fall of Rome and the many wars of the 17th century.

However, a team of economists at UC Berkeley and Stanford University according to (Robinson, 2018) argues that an empirical connection between violence and climate change persists across 12,000 years of human history. For this reason (Motavalli, 2003)

says, that this topic has received serious attention by scholars in the hard sciences, social sciences and even policymakers in the global community. The Government of Nigeria has over the years shown a commendable understanding of the issues associated with climate change. Indeed, Nigeria is a signatory to many international conventions and Protocols targeted towards addressing the various issues associated with climate change such as the need to mitigate and or adapt to climate change.

According to the (United Nations Framework Convention on Climate Change, 1992), Nigeria is for example a signatory to (UNFCCC). The convention establishes “policy guidance” for the various countries of the world to access the implication of the increasing greenhouse gases (GHGS) in the atmosphere and to take steps in stabilizing or reducing them, from endangering environmental sustainable economic and political development. According to (Okali, 2005), as Nigeria is exposed to a number of resources-consuming stressors (ranging from climate change, to corruption which brings about mediocrity syndrome, militancy, Bokoharam to permanent crises and conflicts). Comparatively few resources

remain to react proactively on the climate change impacts. Seeing the climate change as an external shock to the eminent cost by the externalization of cost of a third party, payment and assistance can be considered to be a reasonable way to compensate Nigeria for the negative climate effect.

The problem of global warming and climate change has impacted Nigeria and other developing countries the hardest, due to non-proactive government involvement, lack of political will and technology to abate the negative effects of its consequences. Nigeria is currently dealing with problems like rapid flooding, water scarcity mostly in the north, east, and west; a depletion of natural resources; which hugely led to environmental scarce resources like wild life depletion, deforestation, shortage of green vegetations for wild life to feed on, which also increased nomadic movement, therefore instigating crises between famers and headers. Rise in sea level, diseases and also rising prices of food.

Because food production is unavoidably precarious due to weather reliance, the production of grains and other Nigerians' basic foods is often unable to meet the demands of the Nigerian vast population, due

to environmental degradation orchestrated by global warming. For example, in recent time, in Akwa Ibom, Lagos and Bayelsa States of Nigeria, residents are submerged by flood, making them refugees in their own communities. However, this environmental threat is beginning to emerge as an international security issues. One would ask, isn't climate change a ticking time bomb on sustainable development?

In the long term, the finite nature of petroleum and natural gas (non renewable energy) will become a burgeoning problem for Nigeria, other developing countries and the world economy at large. The world is now transitioning from an era of food abundance, to one of food scarcity as a result of global warming and climate change. Yet, the right to food is one of the most consistently mentioned in international human rights documents, but it is also one of the most frequently violated too. Despite longstanding laws prohibiting gas flaring since 1984, and Nigeria's commitment to global climate conferences. The Nigerian government has been shifting deadline to end the practice, and delve fully into renewable energy sources. The gas flaring activity continues unconstrained, orchestrating global warming and climate change as well as bringing along

with it, a serious health hazards and other negative effects for the entire citizenry.

The main objective of this study is to assess the impact of global warming and climate change in sustainable development and the availability of environmental resources in Nigeria and other developing countries of the world. The specific objectives are to: unfold the impact of global warming and climate change on sustainable resources in Nigeria and other developing nations.

Unfold multiple links between global warming, climate change; political stability and conflict in Nigeria and other developing nations and explore the regime theory to explain the possibilities and constraints confronting Nigeria and other developing countries and leading powers, in finding a global climate change regime and the need for sustainable and adaptation policy framework

## **Review of literature and theoretical Framework**

This section of the paper explains various related literatures reviewed on subject matter climate change a ticking time bomb on sustainable development and scarce resources in developing countries like

Nigeria. It is divided and discussed into titles and subtitles starting from the Concept of conflict and environment, citing the works of Brown et al, Campbell & Parthmore. The science of global warming in the works of Brauch & Scheffran, Csonway & Hulme. Climate change a tinkling time bomb, global warming and climate change a threat multiplier.

## **Conflict and Environment**

Global warming and climate change in the next fifty years will be one of the dominating threats of global security in Nigeria and other developing countries (Adger et al., 2003; Brown et al. 2007; World Bank Development Report, 2010). According to (Brown et al., 2007: 1142), in 2003 policymakers from the Pentagon labeled climate change as, ‘the mother of all security problems’. President George W. Bush former president of the United States of America according to (Campbell & Parthemore 2008), warned that ecoconflicts would soon become a major problem in North-South tensions. Brauch & Scheffran, 2012, says that conflict has been defined as “a contest between two or more actors over scarce and sought-after material and/or immaterial goods”.

In this situation, parties pursue contradictory aims or means. As previously stated, defense strategists and policy-makers according to (Gaast & Begg, 2012), have raised alarms about the impact that climate change will have on energy, food shortages and existing socio-economic problems in the developing world. According to Gaast & Begg, 2012; Scheffran, Link & Schilling, 2012), there have been numerous studies conducted to examine the correlation between conflict and climate change. Several quantitative and qualitative studies have tested hypotheses on the relationship between climatic variables (temperature and precipitation) and conflict-related variables (number of armed conflicts and casualties).

The results have been inconsistent. Some studies found that climate change directly leads to conflict by measuring levels of CO<sub>2</sub> emissions. The challenge of statistical research according to (Toll & Wagner, 2010), on a sub-field like climate change in political science is a lack of data or the difficulty of measuring a variable like global warming. The climate is not weather. It is tough to measure a variable that is measured over decades or even centuries. However, some recent studies have found statistical correlations between the changing temperature and the frequency of war.

## **Global Warming and Climate Change as Threat Multiplier**

Climate change a threat multiplier what does it mean? Using the idea of threat multiplier as a foundation, according to (Eckstein, 2010; Wallbott, 2012; Johnstone & Mazo, 2013), existing tensions will be aggravated and new conflicts generated. According to (Werrell & Femia, 2013), Examining climate change as a threat multiplier is a useful way of thinking about climate change and conflict more broadly. According to (Webersik, 2010), it is less likely that environmental degradation, resource scarcity and population pressures alone will act as a sufficient factor to trigger internal or even intrastate wars in Nigeria and other developing countries. But if we think about those things as increasing the likelihood of conflict, their role in diverse conflicts becomes more reasonable.

A report published by Christian Aid according to (Webersik, 2010), which was signed by 11 retired U.S. generals and admirals argues that climate change is a threat multiplier for instability in most volatile and developing regions of the world which Nigeria is not an exemption. Also, the letter states that there should be a better conceptualization for climate change and conflict. Civil or inter-state war may be

important variables to express instability but political protests or civic uprising can do just as much harm to a world economy as a war. Environmental Scarcity in Nigeria is rarely the sole or sufficient cause of large migration, poverty or violence. Typically according to (Wallbott, 2012), it always joins with other economic, political and social factors to produce negative effects. Presently, according to (Johnstone & Mazo, 2013), the impact of climate change on food prices, sectarian violence and political instability have acted as an aggravating factor rather than the principal cause of the revolutions and political conflict

### **Climate Change in Nigeria and Africa a Ticking Time Bomb**

Africa produces one ton of CO<sub>2</sub> per person per year according to American statistics. South Africa, the most industrialized country of the continent, generates 8,44t, meanwhile Mali which is at the lowest level of industrialization, produces less than one-tenth of a ton per person per year. The whole of Africa produces about 920,000t each year, less than 4% of the global production. By comparison, the United States of America generate about 16t per person per year, altogether about 5.7 billion tons and 23% of

the global production. Therewith they are the biggest producer.

China, the new star in the CO<sub>2</sub>-sky, is going to surpass the USA soon. Although these information according to (Paehler, 2007), dates from 2002, proportions probably haven't changed considerably and can serve to roughly estimate the role that Africa plays in this context of climate change. As Africa is exposed to a number of resource-consuming stressors (ranging from HIV to corruption to permanent crises and conflicts), comparatively few resources remain to react proactively on the climate change. Seeing the climate change as an external shock to the continent caused by the externalization of costs of a third party, payments and assistance can be considered to be a reasonable way to compensate Africa for the negative climate effects.

In January 2007 at the German – African Summit in Accra, initiated by the Federal President of Germany, the former Nigerian President, Olusegun Obasanjo, appealed for international assistance in order to cope with the consequences of climate change. According to (Paehler, 2007), he claimed that all countries should adhere to the respective international agreements; Country report published by Sankt Augustine). The

temperature trend in Nigerian since 1901 shows increasing pattern. The increase was gradual until the late 1960s and this gave way to a sharp rise in air temperatures from the early 1970s, which continued till date. The mean air temperature in Nigeria between 1901 and 2005 was 26.6°C while the temperature increase for the 105 years was 1.1oC.

This is obviously higher than the global mean temperature according to (Spore, 2008; IPCC, 2007), increase of 0.74 OC recorded since 1860 when actual scientific temperature measurement started. Should this trend continue unabated, Nigeria may experience between the middle (2.5°C) and high (4.5°C) risk temperature increase by the year 2100. Rainfall trend in Nigeria between 1901 and 2005 shows a general decline. Within the 105 years, rainfall amount in Nigeria dropped by 81mm. The declining rainfall became worst from the early 1970s, and the pattern has continued till date. This period of drastic rainfall decline corresponds with the period of sharp temperature rise. Although there is a general decrease in rainfall in Nigeria according to (Odjugo, 2005, 2007), the coastal areas of Nigeria like Warri, Brass and Calabar are observed to be experiencing slightly increasing rainfall in recent times. This is clear evidence according to (IPCC,

1996; NEST, 2003. Odjugo 2005, 2007) of climate change because a notable impact of climate change is, increasing rainfall in most coastal areas and decreasing rains in the continental interiors.

### **Overview of Global Warning and Climate Change in developing countries and the World**

Global warming refers to the palpable increases in global temperature that causes the atmosphere to be warmer. According to Nicholson (1998), the earth is getting warmer principally because of human activity which results to the release into the atmosphere of certain gasses, mainly Carbon Dioxide, CO<sub>2</sub>. As large quantities of these gasses concentrate in the atmosphere, they trapped heat, which would have escaped if much of those gasses were not in the atmosphere, thereby raising the temperature of the earth. This is what is referred to as the *GreenHouse effect*. Some of the major effects of global warming include rising of sea level, more frequent violent and catastrophic storms, hurricanes, etc.

As earlier mentioned here, human activity is the chief driver of climate change, and in this regard, deforestation has been fingered as one of the main contributing factors of global

warming. Kenya ratified the Kyoto protocol in 2005, and supports the UNFCCC process as a Non-Annex 1 country. It submitted its first national communication in 2002. Given that its natural resource-dependent economy is highly vulnerable to rising temperatures, changing rainfall patterns and other extreme weather conditions such as droughts and flooding. Developmental policies and priorities are mindful of the need to mainstream climate change concerns with national development priorities; the constitution has a legal commitment to attain ecologically sustainable development which forms the basis for its climate change policy framework.

Kenya has expended significant efforts to forge a comprehensive framework to address climate issues responding to the development of the international climate change regime since the 1990s. The climate change legal/policy portfolio is evolving towards an integrated framework. In 2010, the Ministry for Environment and Mineral Resources launched the National Climate Change Response Strategy (NCCRS), complemented by the 2013-2017 Climate Change Action Plan. The strategy's primary focus is to ensure that adaptation and mitigation measures are integrated in all government's

planning, budgeting and development objectives. According to (Government of Kenya, 2012), the Strategy identifies and recommends specific measures that include suggestions on carbon markets, green energy development, research and development and institutional framework for climate governance. The 2013-2017 Action Plan provides develops implementation framework for the NCCRS (Government of Kenya, 2012).

### **Theoretical Framework: The Regime Theory**

This research dissertation adopted the regime theory to analyze possibility of interests, treaty compliance by sovereign nations and constraints in the global negotiations in finding a global climate change regime suitable to avert future tragedies of the global commons (Hardin, 1968). According to (Little, 2008), Globalization and industrialization has led to the creation of international regimes which have become increasingly important in the contemporary international system. Such regimes function to regulate and facilitate the collaboration among governments, NGOs, and other actors in global environmental negotiations, and to minimize the effects of hierarchy and hegemony construction of global political



system. Krasner in (1983) defines regimes as “sects of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relation. Power and state position in the hierarchical global political system usually influence the fate of regime formation. For instance, the interest summersault during the climate changes negotiations where struggle between national and organizational interest usually persist. This occurred during, and after the Kyoto international climate change negotiations and most recently during the negotiations at CoP15.

The same will happen in any future climate change negotiations if there is no binding climate change regime. International sustainability related regimes usually have capacity building in the core of their formation. This is due to the economic possibilities between developed and developing countries. Such regimes cannot be established or successfully implemented without the participation of developing countries and therefore capacity building is required. According to (Mckinley, 2015.p.184-207) “Constructivists see the world around as socially constructed, they understand the world as coming into being

constructed through a process of interaction between agents (individual, state, non-state)”. According to checkel, (2008), they believe in using soft power in exerting pressure on the politicians at home using persuasion and media powers to form public opinion that can be influential to reach their goals. According to Nye (2004,), “soft power is the ability to get what you want by attracting and persuading others to adopt your goals”. Thus, media performs agenda setting role according to (Robinson, 2008), moreover, realists argue that foreign policy is generated by forces external to state rather than internal to state such as media and public opinion. Thus, media plays a very important role as soft power. It is used by environmentalist and neoliberal institutionalism to increase environmental awareness, to warn citizens about the climate change threat to security.

However, trying to access global climate change and the level of international cooperation, it is crystal clear, that global warming and climate change is a global pandemic. However, it needs a global policy and international cooperation to deal with its causes and impacts. Although national and regional actions are vital, according to (Volger, 2008), Global environmental governance (regime) is a must for climate

change efforts to succeed. It is important to learn from the previous experiences of international environmental cooperation to know what constraints and possibilities might be expected during negotiations and later implementation, although the severity of the problems and intensity of cooperation might be very much. Some of the well-known international environmental conventions and treaties are: International Convention for the Regulation of Whaling (in 1946), Long Range Trans boundary Air Pollution Convention (in 1970), and Vienna Convention for the Protection of the Ozone Layer (in 1985).

### **Research Method**

This paper adopted historical research design. The historical research design is the process of summarizing data and information in order to establish the central theme of an inquiry. Historical design involves attempt to outline key variables and concepts in the political inquiry with the goal of providing relevant information from the past, and

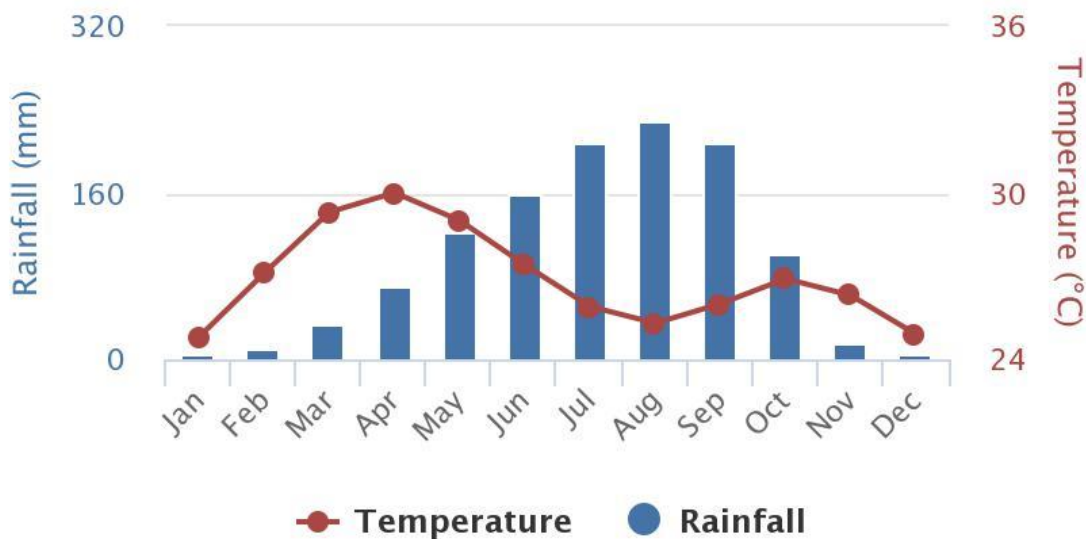
relating it to the present and thus providing understanding and giving a sound explanation to the future; character and relationship between the variables under considerations through a qualitative analysis of secondary data. These variables include but not limited to climate change a ticking time bomb on sustainable development. Multiple links between global warming, climate change, resource scarce, and conflicts in developing countries. The researcher cross examined secondary data in considerable detail. This study utilized secondary data that are gathered from text books, journals, seminar papers, internet print, newspapers, and most importantly over fifty articles and related journals on subject matter was reviewed. Secondary method of data was used. The researcher visited few libraries such as national library Ogun state, national library Abuja, internet prints, and newspapers. The analysis was done through the qualitative analysis of secondary data. Since the objective of this study is not to make statistical inferences. The historically reviewed secondary data was used to support or question theoretical assertions of the impacts of global warming and climate change on resource scarce and sustainable development in developing countries like Nigeria. This analytical procedure is not how

ever without limitations, this is because it does not provide room for statistical inferences that would have enable inter-

subjectivity, generalization and prediction to be made.

## PRESENTATION, ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

### Presentation of Data



### Average Monthly Temperature and Rainfall for Nigeria from 2015

It is important to evaluate how climate has varied and changed in the past. The monthly mean historical rainfall and temperature data can be mapped to show the baseline climate and seasonality by month, for specific years, and for rainfall and temperature. The chart above shows mean historical monthly temperature and rainfall for Nigeria during the time period 1901-2018. The dataset was produced by the Climatic Research Unit (CRU) of University of East Anglia (UEA).

Though Climate change is not ranked among the five top most ageing causes of conflict in Nigeria which includes tribalism, resource control, religion, land and trade. But reality is altered if not included. The past thirty-six months have been fiercely violent for several Nigerian states, which have experienced rampaging Fulani herdsmen killing many subsistent farmers whilst trying to protect their land from grazing herds. A number of reasons have been given for the violence, but no connection has yet been

made between the herdsmen migrating south and the effects of climate change. According to (Chigozie, 2018), herdsmen - for whom cattle is a source of livelihood and wealth - have killed approximately 1,000 Nigerians. Myetti Allah - the umbrella body of the herdsmen - justifies the killings in the name of self-defense.

### **Discussion of Findings**

Nigerians' understanding of the concept of climate change is shaped by the importance they place on trees and rainfall for agricultural reasons, perhaps the trees are seen as a means of protection, a barrier against drought, heat, and unusual seasons. People also see trees as protection against extreme weather whilst the waters as a source of livelihood both for human, crops and animals. However, they do not seem to understand what climate change means in real sense. The findings from this research suggest that although most citizens from developing countries like Nigerian for example, do not know about climate change in the scientific sense, they have certainly experienced its observable changes in the weather.

Though the Nigeria government has been signatory to almost all global climate conferences and agreements held since her involvement into global climate change negotiations. Nonetheless, she has not been proactive to policy making in line with mitigating the problems caused by global climate changes due to politics of geopolitical zones, neo-colonialism and dependency syndrome as orchestrated by the industrialized nations.

### **Conclusion and Recommendations**

This study has interrogated global warming and climate change as a threat multiplier, which increases political instability, environmental scarce resources in developing countries such as Nigeria. As a ticking time bomb, climate change has largely been created by human mechanisms. Rapid industrializations and the use of non-renewable energies (like oil and/gas) has increase CO<sub>2</sub> in the atmosphere. This has altered the climate, which has had adverse effects on regional and local weather patterns. These weather patterns have increased the occurrence of natural disasters. These natural events have put additional pressures on already fragile governments and populations. Specifically, that ethnic

fractionalization, unemployment, and climatic events (droughts, famine, wild fires and floods) increase the probability of riots, protests and revolutions.

The following are therefore recommendations to the government, the people and the society at large;

1. There should be mainstreaming climate change into economic frameworks and sectorial policies in order to ensure integrated adaptation responses;
2. Provisions of national adaptation policies that provide clear guidelines for integration and implementation of strategies, programs and activities.
3. Diversification of the economy away from oil production and channeling resources to manufacturing and service sectors of the economy including agriculture provides the key to Nigeria's economic stability. This will ensure that the global shift away from fossil fuel energy sources will not create any significant negative impact on the economy and help also to break Nigeria and other developing countries (third world nations) out of dependency and neo-colonial bonds in the future.

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