Climate Change: An Emerging Threat To Nigeria's National Security

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Abstract
Current and past realities in Nigeria's national security resonates a dominance as well as a reoccurrence of newly emerging and non-conventional security challenges as threats to public safety and stability in the country, despite a seeming propensity to concentrate on traditional and military threats. The attention garnered is enormous within and outside Nigeria following the constant danger to lives and order and other varying forms of social disruptions including heavy casualties. This research delves into a salient aspect of these new and emerging threats: Climate change. It finds that climate change is the most formidable threat security in Nigeria in recent time and going into the future; human and state alike. In addition to having a broader impact radius; including a high vulnerability as well as low adaptiveness among citizens being a developing country, the effects of climate change on the Nigerian society could be more destructive than analysts' project meaning current impacts may yet be minimal. Hence drawing a critical need for immediate response and action. The paper submits that the attempt to contain this rising threat must incorporate higher securitization of the threat and its various forms; investment into public sensitization on the phenomenon; a general capacity building on alertness and crisis response system as well as general adaptivity to harsh outcomes of climate change. This piece equally enjoins a general shift in attitude together with the total reform of the Nigerian security structure to comprise and target threats to human security especially.

1. Introduction

For so long, military threats and ultimately wars have continued to dominate security discourses. The turn of the 20th century altered these dynamics. Around the globe today, there seems to be a new trend of a widened definition and identification of character of threats to security, entailing new distinctive, and significant risks not just to the state, but to individuals within it. Wars and its frequency declined, at least at the state level, yet social stability remains undermined and under threat from these new challenges just as with war.

Today, threat projection, identification, and real-time experiences have primarily widened the scope of security, exposing varying conditions which continue to threaten especially human security and general social stability. Like most other states, Nigeria is faced with these new challenges and a predominantly ineffective security structure. Made up of over 250 tribes, Nigeria is the biggest diverse country in Africa. Official figures specify that Nigeria has a population of over 180 million (and still growing); (UNDP, 2018; CIA, 2018) about a quarter of the people living in Africa, south of the Sahara, among being touted as Africa's largest economy. Nigeria is currently under siege not just from the radical Islamist sect Boko Haram and her splinter groups and militancy in the Niger Delta region. A recent security threat that has brewed out of the fight between nomadic cattle herders and some farming communities in which many have lost their lives as a result of issues over access to grazing space. The media across Nigeria is rife with frequently reported acts of these killer herdsmen and the enormous number of deaths that arose from the periodic attacks, clashes, and counterreactions. Without paying heed to the perennial ethnic and religious mistrust in the country between the Muslim-dominated North and the Christian-dominated South. It is safe to state that these attacks were indirectly influenced by the encroaching desertification from the Sahara Desert that has affected lots of farmland and villages in the North thereby forcing so many people into migrating towards the Middle Belt and further South. A situation where there are more people and livestock but lesser water and fewer green lands, then there is bound to be violent clashes in a bid for people to

survive. This clash over grazing lands and water could become worse as the effects of climate change become more drastic; with direct implications not just internally, even for the region and wider globe.

Equally, the adverse change in climate has also displaced lots of persons and seen to the loss of lives and lands to deadly sweeping floods across the country. Recent years has seen a growing trend of annual disastrous floods that has and continues destroying lots of properties while registering a high rate of casualties in almost all the states (regions) in the country; an incident that has equally affected agriculture and food supply. Presently, it is becoming increasingly clear that a good number of other security challenges in Nigeria are connected, in very many ways to the effects of climate change as the country's food production, infrastructure, arable lands, crime rates, transportation network, natural and human resources are susceptible to the adverse changes in the environment. Indeed, the adverse climate change in Nigeria is an important security aspect worth addressing as it destabilizes state and human security both directly and indirectly.

These emerging security problems and threats to Nigeria's national security bring to mind the Paradox of growing, sleeping or undermined threats to public safety, and an urgent need to neutralize as well as build adaptive mechanisms against them while reforming Nigeria's out-dated and narrow-set security structure. Based on this reality, this study seeks to examine the phenomenon of climate change as an emerging and potentially biggest security threat in Nigeria. It analyzes the links to Nigeria's more extensive security workings as well as the general implications of climate change to it, including advancing some strategies to slow down as well as contain the building threat in Nigeria. Also, it poses the critical question as to what really causes the change.

2. Understanding Climate Change and National Security

Climate change is a term in vogue in today's world, not just among environmentalists, it is increasingly becoming a huge concern among policymakers, social scientists and amongst security experts with each passing day. There is a growing consensus that it is the biggest challenge facing mankind's safety now and in the future. Yet, as Agbu observes, "*it is* [also] *right to observe that many are still ignorant of climate change and the issues surrounding…[it]*" (2010, p.47). Nevertheless, it continues to dominate issues in environmental and global governance circles especially in contemporary time. Although it is an issue often likely to be addressed mostly as an ecological concern rather than one of security. Like most new and emerging security concern, the periods from the end of the cold war has seen it receive building attention, especially in security discourses. Despite the multi-disciplinary outlook and attention it draws, its definition and classification are not easily one with a consensus, particularly with regard to security. Especially since its reality is often still dismissed as some fancy science theory or scientific myth in a lot of circles. More often than less, there is a tendency to underplay and deny the phenomenon in societies with more adaptive abilities. At other times and in other places, people with most vulnerability don't readily recognize the phenomenon as taking place, despite being most at the mercy of its effects. In all these places, direct impacts of climate change are most often addressed individually based on their outcomes without any links to their root cause.

Indeed, the attempt to define climate change is by no means easy nor a uniform one, especially for a phenomenon still not generally recognized and linked particularly as a security challenge. Among some of the most popular definition is the one offered by the Intergovernmental Panel on Climate Change (IPCC). It considers climate change as a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period typically decades or longer. Although Odjugo points that Climate change is different from the generally known terms like climatic fluctuations or climatic variability. Differentiating them with various temporal scales from monthly, seasonal, annual, decadal, periodic, quasi-periodic or non-periodic. To him, climate change is long, stretching to a space of at least 150 years with clear and permanent impacts on the ecosystem (Odjugo, 2010, p.47). Generally, it denotes an alteration in weather pattern as against a regular model over time. Olaniyi et al. (2014,70) assert that the phenomenon is merely an increase in average global temperatures. Typically, Climate change is a long enduring process, and its effects are sustained as well.

On the other hand, defining 'national security' isn't any easy equally. Over time, it has garnered some reputation as a highly dynamic and evolving concept especially in the aftermath of the cold war. Until the end of the East-West standoff, national security emphasized on the state and militaristic threats to the state. Hence, the level of weapon acquisition and procurement translated to the level of national security achieved.

In this sense, Hartmann, as cited by Onuoha, finds national security to be "*the sum total of all vital national interests of the state.*" (2010, p.186) To him, "*because a vital national interest is one for which a nation is willing to resort to force or war either immediately or ultimately concepts of national security will vary from state to state in direct proportion to their willingness to risk either conflict or war at any given time.*" Logically, maintaining a monopoly or an advantage on instruments of force among other states translated to the level of national security achieved, since force almost definitely secures all vital interests of a state among her peers. Notwithstanding, critical questions continued to be cast on this understanding of the concept- do/did arms guarantee safety from all danger to the individual, the society (social stability) and the state? Can national security be achieved without guaranteeing other aspects of security in a nation?

As the cold war ended, concentration on the state-centric conceptualization of security wore down with it. Likelihood of inter-state wars diminished, yet states and people within it continued to be threatened by a wide range of other threats which soon gained significance. Arms and huge stockpiles of it especially were ineffective in the face of epidemics and pandemics, natural disasters, terrorism, etc. Thus, rendering the cold war conceptualization obsolete while drawing critical questions on what truly constitutes the security of a nation. The new school found threats to people and by extension states encompassing, consequently, national security a broader phenomenon than earlier held. Such wide dynamics included not just military variables but economic, cultural, technological, political as well as environmental aspects (Onuoha, 2010, p.187). With a wider target at securing not just the state. In line with the new school, Oche opines that national security constitutes "*the entirety of geographical, political, economic, military, social and cultural – that are necessary to guarantee the sovereignty, independence, promotion of national interest and freedom from threat…*" (Ogaba, 2008, p.99) Towing the same line, Onuoha points that

> …*national security has both qualitative and dynamic dimensions. Qualitatively it encapsulates the unending drive of the state for improvement in the safety and protecting the lives, property, and resources within its defined territorial boundary. It is dynamic in the sense that its contours oscillate with the emergence of new threats or the transformation of old threats, which may come from within or outside of its territorial boundary.* (Onuoha, 2009, p.3)

Thereby accommodating the different aspects able to limit the quality of living as well as posing danger to not just the state, but individuals and societies in it.

Although, a clear-cut definition of what entails Nigeria's national security seems blurred in practice, Onuoha goes further pointing to the goals of Nigeria's national security as seeking "*to strengthen the Federal Republic of Nigeria, to advance her interest and objectives, to contain instability, control crime, eliminate corruption, enhance genuine development, progress, and growth, and improve the welfare and well-being and quality of life of every citizen.*" (Onuoha, 2009, p.4 & 2010, p. 187) Such include the need to protect the individual and the state from the totality of wide threats to her safety and stability, including enhancing capacities in this regard. Thus, guaranteeing a general order and an atmosphere of development.

The broader effects and linkages of climate change on societies today go beyond some random ecological happenstance as always and often held. Hence, making it not just an issue for environmentalists but also one for policymakers and security stakeholders in states, considering the emerging effects of devastation, destabilization or disruptions to societies as well as heavy human casualties. Thereby marking a direct counter-reaction with the security of nations. In this study, climate change is taken to mean the sustained deviations in climate pattern over a longer period of time triggered by a combination of both natural and human forces with the ability to negatively affect the environment and the general quality of life of people in the society; while national security entails the aggregate of what guarantees the safety and stability of both individuals and the entire state within a defined country.

3. Explanatory Framework

Climate change is indeed a unique challenge, threatening the security of societies in a very unique way. Not in the usual/conventional method, however with the capacity to trigger a chain of conventional security threats. Consequently, understanding into it and its dynamics in International Relations and as well Strategic/Security Studies is a relatively new one (and acceptably a complicated one). In like manner, the practice of adopting theories in explicating it as a security issue is a growing one with relatively few thoughts put up, more so in Nigeria's case. Nonetheless, among some of the theories holding explanatory capacity and offering suitable insights into how climate change works and how it affects the national security of states is the systems theory. The paradigm captures the globe as an interdependent system of

interactions comprising of different structures/components and sub-systems which make it up. The stability or otherwise of the entire system is dependent upon the changes in the components which make up the system (Flood & Ewart, 198, p.142), comprising of the global level, regional, state, the intra-state and individual levels. Thus, the theory offers an explanation into the anthropogenic causes of climate change. Adopting the approach, it makes more sense to understand that actions (or inactions) at every level sustaining carbon emissions from different states in the global system have contributed to the growing phenomenon of change in climate which continues to affect same individuals, states and the stability of the entire system level. It matters less what level of greenhouse gases Nigeria or any developing country emits when global emissions continue to rise since she (they) are part of the same system with heavy emitters of these gases.

Also, in a process where systematic stability is collective and dependent on the components, growing contemporary effects such as forced migration, floods, desert encroachment, and resource conflicts are all shocks from the component levels affecting the entire system and the complex level. Therefore, incidents of herdsmen crises all over Nigeria or the prevalence of Boko Haram in Nigeria's North East in Nigeria, Niger, and Cameroun is better understood since events in a given country or province hold significance for other countries or provinces in the system, much to her neighbors. Either as a natural disaster or as a conventional security challenge, the sub-systems, being individuals, communities, and different states are all contributors and partakers in the growing fragility of the system which they contributed to regardless of the levels of impact as in the case of industrialized and developing states.

4. Climate Change in Nigeria: Causatives

Generally, there is a broad consensus among scholars and analysts on the causes of climate change. It is agreed to be caused by the increase of greenhouse gases in the atmosphere, occasioned by two factors grouped primarily under natural process (bio-geographical factors) and human activities (Anthropogenic factors) (Odjugo, 2010; Ebele & Emodi, 2016; Ogbo et. Al. 2013). Although human activities have been known to maintain an increasing dominance in this dynamic in recent times, particularly as calls to halting this trend grow. According to Odjugo, "*The natural processes* are *the astronomical and extra-terrestrial factors. The astronomical factors include the changes in the eccentricity of the earth's orbit, changes in the obliquity of the plane of ecliptic and changes in orbital procession while the extra-terrestrial factors are solar radiation quantity and quality among others*." Such represents the gradual and natural changes that have occurred over time as centuries.

In contrast, the release of greenhouse gases from human activities such as burning fossil fuels, gas flaring, urbanization, agriculture and changes in land form the crust of the anthropogenic factors, the most significant contributor to atmospheric greenhouse concentration (Ebele & Emodi, 2016, p.3). The causes of atmospheric greenhouse gas concentration in Nigeria have been diverse albeit low in output. Despite operating a mostly fossil resource-based economy and being among the most vulnerable to climate change, most opinion considers Nigeria's relative impact as human factors (being a developing country) as low in comparison to industrialized/developed states. Concretely, Nigeria's carbon emissions rank low in comparison to biggest emitters as China, the US, the EU, India, Russia, Japan, who remain the most significant contributors to greenhouse emissions and by extension global climate change (USEPA, 2018). Being that the phenomenon of climate change extends over political boundaries, it is safe to state that accumulated activities from around the globe, in this case, most especially emissions in developed countries and in other places have affected climate change in general, with Nigeria as part of the system.

In Nigeria specifically, some of the most common practices that affect climate change include industrial and automobile emissions, including predominantly oil exploration, refining, and poor environmental acts like oil spillage and gas flaring

which lays waste to vegetation in oil-producing areas. Other common and everyday actions include deforestation (for mostly farming, industrial productions, construction reasons, and other exploitations of forest resources, etc.), overgrazing especially in the North, bush burning and general poor farming practices.

5. Climate Change and Nigeria's National Security

There is always a tendency to view climate change only from the perspective of an ecological challenge, just as it is often to concentrate defense resources on military aspects of national security in developing states like Nigeria. Whether or not current dynamics and policies reflect this in state security structures (Nigeria

inclusive) is of little importance since climate change affects societies and their securities in varying ways. Whether directly or indirectly, or through a chain of connections, concretely, "*national security is the aggregate of issues of monumental importance to a country's survival. The issues would include the defense of the territorial integrity, which would comprise the defense of both human and material resources that such a country may have been endowed with."(Nuhu, 2007, p.349)* Also, as Nuhu further points, "*it is necessary to recognize that security may be defined not merely as a goal but as a consequence* [Which in this case climate change initiates]. *This means that we may not realize what it is or how important it is until we are threatened with losing it. In some sense, therefore, security is defined and valorized by threats which challenge it.*"(Ullman, 2011, p.13) In this instance, rising food insecurity/shortages, resource competition, the spread of diseases, natural disasters as flooding, etc., are all aftermaths of and are intensified by climate change. They pass today as core national security priorities; with the capacity to cause even more serious security concerns as and even beyond armed or military confrontations.

The varying effects of climate change and its linkages on human lives as well as properties, underline the link to social stability and order and by implication, national security. Climate change and national security share a link best described with the denominator *'threat'* since the former degrades the later or invariably human security (the quality of life of inhabitants of a state, region or even the globe as in this instance), an aspect of national security. While the latter's expanded scope seeks to prevent the effects of the former. Also, not only does climate change and its aftermaths degrade and disrupt lives of people, it triggers responses which require resources as would common security challenges. Whether directly or through diverting resources just as other threats which national security is designed to limit; be it military in cases as quelling usual riots, internal group conflicts (over limited resources as water) or immediate response and relief for the distressed and displaced. By and large, climate change affects National Security in many diverse ways conventional acts would. It is no wonder Dokubo observes that "*where climate changes abruptly, security problems will be immediate and extensive and perhaps even essential." (Dokubo, 2010, p.75)*

Additionally, the phenomenon has a multiplier effect on other threats and exacerbates existing tension and instabilities as a broader security scale is affected (Hedegaard, 2008, p.II). It is perceived that

> *Environmental change* [climate change] *can weaken the economic base that determines military capacity. In some developed countries and in most developing countries, natural resources and environmental services are important to economic growth and employment. Income from and employment in primary sectors such as agriculture, forestry, fishing and mining, and from environmentally dependent services like tourism, may all be adversely affected by environmental change…*(Barnett, 2013, p.198)

Even so, it is becoming increasingly evident with time as Barnett further illustrates that

> *Climate change too often is…a risk to the territorial integrity of states. For example, cyclones* [floods, droughts, etc.] *are likely to be more intense under climate change…* [It] *poses a risk to critical infrastructure such as those required for producing and distributing energy, water, and food for transport and trade... It also poses risks to military facilities such as naval yards and training grounds.* (2013, p.198-199)

Most often, the ability of a state to guarantee order, protect and to provide as it ought to be is affected hugely following: disruptions, the huge cost of reconstructions, a humanitarian challenge as well as consequent conflicts over shrunk and available resources, be it within a state or among states. Hence, characteristically affecting the national security of nations as in even normal war times. Thus, climate change cuts across Barry Buzan's broad conception of security, encapsulating: military, political, economic, societal and environmental aspects (Buzan, 1990, p.2).

Therefore, securitization or not of climate change, while recognizing only aftermaths of climate change as national security priorities is just a matter of policy. After all, model security strategies involve targeting and neutralizing sources of threat, which in this case Climate change represents on a grand scale.

In Nigeria, instances of climate change and its vagaries mirror a huge link with security although, like most emerging and non-traditional security issues, the former continues to lack the attention it needs, especially at decision-making levels. Often it is subjected to positions where it is mostly underrated or profoundly undermined out of ignorance, such that the effects have been real and telling all over the country in different ways, to the extent that it poses a formidable threat to even more people at an alarming progression level.

Chief among these effects in Nigeria is the physical destruction and impact on people and infrastructures following the prevalence of natural disasters. Odjugo finds that

> *one of the most significant impacts of climate change is the worsening condition of extreme weather events like drought, flood, rainstorms, windstorms, thunderstorms, landslides, avalanches and tsunami among others... the frequency and magnitude of wind and rain did not only increase they also killed 199 people and destroyed property worth N85.03 billion in Nigeria between 1992 and 2007* [alone]. (Odjugo, 2010, p.52)

Recent common examples include the flooding in 2012 which covered 30 out of the 36 states of Nigeria, killing hundreds, displacing millions as well as leaving an estimated N2.6 trillion worth of damages (Maliki, 2017). In 2017 as well, nearly half the states in the country were affected; characteristically killing scores as well as displacing many and damaging properties(Ojo 2017; Al Jazeera, 2017), among dozens of incidents in the past. The present year 2018 so far has remained on the same harsh pedestal with states as Anambra, Delta, Kogi, and Niger affected already (Odufuwa & Adebayo, 2018; Al Jazeera, 2018). Earlier, Ogun, Katsina, and Adamawa states were heavily affected (Relief web, 2018). Overall, close to a million people have been directly affected, including hundreds of lives and properties lost (Odufuwa & Adebayo, 2018). Cities such as Lagos as well as the entire Niger-Delta states representing Nigeria's most viable economic centers increasingly are getting under more threat of being submerged by the rising sea level. Lagos alone "*With a GDP triple that of any other West African country,...is the commercial and industrial hub of Nigeria. Lagos is home to many industries and much large commercial infrastructure and has greatly benefited from Nigeria's natural resources of oil, natural gas, coal, fuelwood and water*", (Mehrotra et. Al, 2009, p.25) *as well as* having a population in the excess of over 14 million people (Leithead, 2017). Niger-Delta states on another hand, harbor almost all of Nigeria's oil fields and installations and infrastructures and millions of inhabitants. Also, other issues as "*the intrusion of saline water into groundwater supplies is likely to adversely affect water quality, which could impose enormous costs on water treatment infrastructure*", (Mehrotra et. Al, 2009, p.27) including spread of diseases; the displacement of many living in floating slums (as in Lagos) which are potential humanitarian nightmares and resource conflict possibilities. Thus, marking the lurking huge dangers at hand.

At the same time, climate change has and keeps instigating perennial group conflicts in Nigeria in different forms. Nigeria's marauding killer herdsmen crisis is a recent and longstanding example. According to Udeh,

> *The Fulani herdsmen are nomadic and habitually migratory. They move from North to South annually with their cattle in search of grazing fields. Due to expansive desertification, drought and unchecked deforestation in Northern Nigeria, the herdsmen naturally seek greener pastures southward. As the resultant migration has intensified, so too has violent clashes over grazing lands with local farmers in the south and pastoral herdsmen whom the former accuses of wanton destruction of their crops and forceful appropriation of their lands.* (Udeh, 2018)

Climate change within and outside Nigeria has intensified competition for resources as water bodies and land while increasing potentials of more communal conflicts and in general undermining stability and order. Additionally, typical crowd clusters around public resources such as hospitals, temporary shelters, etc. instigated by climate devastations in itself are potential conflict spurring situations, as more people compete for access to limited resources and services, primarily as frustration and desperation sets in. In most cases, massive loss of livelihoods is excellent stimulants to a life of crime as a means of survival for most people. Thus, making for more insecurity.

Healthwise, the effects have been even more terrible. The phenomenon of Climate change has been known to have intensified spread of even more diseases. Extreme weather conditions have in many cases served as disease vectors or provided favorable niches to them. Odjugo notes that

> *Water scarcity* [following drought] *will create the tendency for concentration of users around remaining limited sources of water. Under such circumstances, there is increased the possibility of additional contamination of the limited resources of water and transmission of water-borne diseases like cholera, typhoid fever, Guinea worm infection, and river blindness... the increasing temperature will mean northward migration of mosquitoes and malaria fever...* (2010, p.52)

The regular and occasional outbreak of these diseases above in the country lend credence to this both directly and indirectly. Other likely diseases and potentially death causing conditions include heat exhaustion, famine, cough, asthma, depression, skin cancer, extract, in addition to outbreaks of

cryptosporidiosis, giardiasis, amoebiasis, etc. (Odjugo, 2010, p.52; Ebele & Emodi, 2016, p.8) Thus, increasing the already high mortality rate especially among the poor and most vulnerable.

Also, coupled with other effects, incidents, and consequences, the various manifestations of climate change put even more pressure on Nigeria's weak crisis response management system, institutions, and spending structure. An already beleaguered country struggling to meet most of her developmental problems is squeezed even further. Besides destruction in infrastructure and livelihoods, in the past, *"climate change has cost the Nigerian government a huge sum of expenditure. The federal government has disbursed ₦3 billion from the ecological fund in the last two years* [2008-2010] *..."* (Ebele & Emodi, 2016, p.9) The fund continues to get more budgetary allowances till date. In fact, Premium Times observes that "*In nine years, between 2007 and 2015, Nigeria set aside an average of ₦48,055,829,613 yearly as the ecological fund. Thus, a total of ₦432,502,466,521 accrued to the Fund during this time. Out of this sum, 57 percent, ₦245,721,482,473, was realized in four years, 2011 – 2014, when the country earned a lot of money from the rise in global oil price.*" (Premium Times, 2016) The situation is even more complicated. The amount being requested by various communities, groups, and politicians for ecological problems in their respective surroundings from the Ecological Fund Office is more than ₦1.1tn (some ⅓ of Nigeria's 2018 budget) with the Agency getting between ₦12bn and ₦15bn quarterly to address these problems in different parts of the country (Nnodim, 2018). All other sectors from the security agencies, health institutions, etc. don't fare any better. Most logically, they experience more activities in the forms of rising conflicts, criminality, disease outbreaks and injuries among others more than they are equipped to take on. This threatens social stability even further.

Most significantly, climate change has told and continues to tell on agriculture and the general food security in Nigeria. In different ways ranging from droughts and desert encroachment, erosion, flooding, etc., food production has been significantly undermined. Scholars and analysts, in general, are in agreement that it has already led to a shift in crop cultivation in the past, from the preferred crops: Guinea corn, followed by groundnut and maize to millet followed by maize and beans due to increasing in temperature and decreasing rainfall amount (Odjugo, 2010, p.52; Ebele & Emodi, 2016, p.5). A fast encroaching desert in the North has not been helpful either, it has reduced even further the lands available for arable and pastoral farming while shortening the overall planting season in a core part of Nigeria's agriculture belt. Food production is even worse off following the considerable drop in rainfall as Emodi points that over 80% of Nigeria's population depend on rain-fed agriculture (Ebele & Emodi, 2016, p.6). In other ways, rising sea water levels in the South and coastal planes have been disruptive, covering many farmlands, while limiting fishing and catches. Also, as with human diseases, increasing hotness are perfect niches and incubating conditions for the spread of tropical pests and diseases of crops and livestock. It is safe to state that droughts, floods, and insecurity from farmers-herdsmen clashes have made farming less lucrative and unattractive, with more people abandoning farming. The general effect is low productivity, shortages, increased loss of produce both in crop and livestock, loss of revenue and its attendant result of increased hunger, poverty, desperation and degradation of the quality of life among the people.

Demographically, the general effects have been massive on Nigeria likewise. Internally, the linkage effects of climate change as conflicts among herdsmen and farmers; including occasional floods have left many refugees and desolate in their own country. The impact of climate change over West Africa, in general, is so vast that states like Nigeria often have to bear the brunt of humanitarian repercussions and enormous forced-migration flows. Nnoli observes that on a more comprehensive and external scale, "*Nigeria not only has to deal with desertification and its victims in its northern states of Sokoto, Katsina, Kano and Borno* [currently her entire 19 northern states]*; but it also has to contend with similar victims from Niger, Chad, and Mali.*"(Nnoli, 1988, p.134) Also, forced migrations from hotspots in Nigeria's North East it must be pointed are also considerable challenges to neighbors as Niger and Cameroon. The effect from this angle is much expansive than analyzed especially on the broader security of the region and pointedly Nigeria. Miller confirms this stating that in such conditions,

> *Refugees…are a considerable economic cost on neighbors, and even more so if they are carrying infectious diseases such as HIV/AIDS, as they often are. State failure* [and general effects of climate change] *disrupts cross-border trade in the region, which can be a major economic burden because most countries' largest trading partners are their immediate neighbors…*[Refugees] *buy fewer*

goods, produce less for the world economy, create no businesses, and invent no products, but have more opportunities to contribute to crime and political violence that crosses borders. (2010, p.65)

The implications with the likelihood of this scenario are damning for Nigeria and are very wide and costly for even entire regions and wealthier/ more powerful states to tackle.

6. Recommendations

Despite an apparent low knowledge on the actual effects of climate change, the impending threats to human security are well established and practical in Nigeria to be denied or undermined. A quick fix is practically not possible. Climate change is a phenomenon that has come to stay, yet allowing it a free run would be even more dangerous and severely threatening as it poses enormous dangers to Nigeria's overall stability and security. Given this built up reality, it is imperative that urgent action is taken by stakeholders at all levels of the society to make dedicated efforts at combating and strategically weakening the spreading phenomenon of climate change and its effects in general while enhancing societal adaptiveness to the impact.

More importantly, investments must be made into cost-effective ways of combating climate change in the environment. Most ideally, research institutions must be funded to explore alternatives such as producing crops that are resistant to drought and heat, including diseases. In line with this push, aspects like the use of renewable energy sources must be promoted and encouraged especially domestically. Also, proper irrigation and water flow management in dams and general drain policy must be adopted to manage incidents like the perennial flooding or scarcity of water among similar occurrences. In line with this, development plans must be followed with strictness against illegal constructions on drain routes, etc.

As a national approach to the sweeping effects of climate change in Nigeria, a national strategy must be centered on the need to invest in more public awareness/orientation especially on how to treat the environment. Majority lack knowledge of the reality of climate change and how actions of everyone contributes to this especially with most ordinary and mundane acts as bush burning, overgrazing, and emissions. More extensive knowledge of what constitutes climate change, how it occurs and how every day and straightforward actions contribute to it will most definitely limit the number of human activities intensifying the problem most especially in the country. Narratives such as: '*Taking Care of Your Environment*' or '*Plant a Tree Today*' would be helpful. Collectively, eliminating or reducing ignorance around the phenomenon is strategic in combating its spread and general effects, as well as in containing it. Thus, schools, mass media, and social agencies must be brought in in this regard.

More importantly, Nigeria must get realistic with climate change, "*these likely future drivers of insecurity do not respect national boundaries and will not be sustainably addressed by unilateral approaches.*"(Brock, 2012, p.2) According to Oladipo, *"The Earth's atmosphere does not differentiate greenhouse gases by country of origin. One country's emissions are another county's climate change problem. It follows that no one country can win the battle against climate change acting alone. Collective action to forge collective solutions is not an option but an imperative..."* (Oladipo, 2010, p.159) Her best chances are through proactive concerted efforts with other nations and stakeholders. Thus, belonging and staying committed to international agreements on the environment or climate change as the Kyoto Protocol is not enough. Nigeria must take full advantage of these platforms by building up more consensus especially among developing and more vulnerable states on getting better deals and assistance among the comity of nations. Specifically, on capacity building and building institutions targeted at crisis response and management, reducing vulnerability and enhancing adaptive mechanisms.

On the whole, Nigeria's National Security policy and mechanism is mostly outdated and needs urgent re-examination. It must be reanalyzed and redefined to identify new and emerging threats, aspects and realities, as well as reflect the dynamics of contemporary times. A holistic and widened approach would make for more awareness, threat projection as well as readiness to tackle both hard and subtle threats to Nigeria's security, be it military or not including other emerging ones.

Politically, bold steps need to be taken as well. The political class must incorporate informed individuals who are aware of the impending dangers of unconventional threats (as recent ones) and committed to taking proactive and bold steps in the security of citizens when they are needed. This is an important step. Revamping the security approach and working with thorough research and accurate intel-based strategy requires the backing of such leadership, as the recycling of uninformed, corrupt, old money bags and emotive characters have been found wanton and limited in the face of these threats. The seeming

institutionalized practice where politicians embezzle and mismanage Ecological Funds in Nigeria must be stopped at all cost and proper monitoring of such expenditures institutionalized.

Tied to other strategies is the need to strengthen environmental laws in Nigeria. The current legislation is too weak, while enforcement has been almost inexistent. Thus, reflecting the low levels of understanding and priority given to human security and factors affecting it in general among policymakers. Laws must be made and strengthened at all levels to hold individuals, groups, firms, including Multinationals accountable for any action against the environment. Acts such as indiscriminate bush burning, tree falling, oil spillage, or gas flaring must attract heavy sentences either with hefty fines, jail terms or both, irrespective of who is involved. Active monitoring, as well as rapid response mechanisms, are also prerequisite to support this.

7. Concluding Reflections

The goal of this study is studying into the growing incidents of climate change and its dangers to security to in Nigeria. It was established that the general effects of climate change are too expanded, spread, felt, as well as varied to be ignored in Nigeria. From massive flooding; rising heat waves; growing desertification; droughts; dried up water bodies; erosions; the spread of diseases (as meningitis, cholera, etc.); food insecurity; forced migration; including attendant resource conflicts among other interlinked ones. It is safe to state that the growing threats from and posed by climate change on the Nigerian state continue to grow and is interlinked to a host of other emerging and current security challenges to Nigeria's national security with broader regional or global implications. So far, Nigeria's vulnerability and adaptiveness levels haven't fared any better, mostly following a geo-position between a rapidly encroaching desert from the North and a rising and extensive ocean line in the South, including a weak economy. Also, a continued narrow-set security strategy and structure built and targeted at mainly military threats to security, including a fossil fuel-dependent economy has undoubtedly not aided her plight. This is coupled with continued widespread and everyday acts as bush burning, deforestation, overgrazing and poor farming practices among citizens, mostly due to low knowledge on the threat at hand.

Consequently, it is imperative that containing the building threat of climate change in Nigeria must get the required attention and priority it deserves at all levels of the society. More awareness and recognition must be made on the threat level at hand and how it affects the nation, especially among the most vulnerable class. It is in Nigeria's best interest to adopt feasible time-structured plans in combating the menace domestically and at the international level. The threat of climate change cannot be undermined as mere academic projections, geek talk nor rhetoric. The threat is so real and complex as the varied aftermath on Nigeria's society tells. The country cannot afford her usual after-crisis response when the lives and safety of so many and its general stability is facing a direct threat. In real terms, climate change is an issue in which ignorance, neglect or slow response translates to catastrophes of cataclysmic proportions on the Nigerian people. Immediate action, reaction, and commitment are Nigeria's best chances at halting the growing threat level.

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