# The Nexus between Climate Change and Criminality: The Nigerian Experience

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Abstract: - The increase in global temperatures is worsened by frequent natural events and human activities. Climate change has taken a prominent space in the global discourse on crime and criminality. Compared to when the subject centred around the discussion on the depletion of the ozone layer and global warming, today, the narrative revolves around the implications of changes in weather and climatic conditions in relations to violent crimes or conflict that traverse vast social, economic, and political spaces in different countries. Global warming and climate change refer to an increase in average global temperatures in the Earth's near surface air and oceans, which occurs due to human activities such as deforestation and the burning of fossil fuel such as gas flaring. The trend is projected to continue, if unchecked. This paper seeks to explore the nexus between climate change and criminality in Nigeria. It further examines the main ecological changes that predispose conflict dynamics of security threats factored by climate change to peaceful co-existence in Nigeria. It concludes recommendations on the way forward.

Key words: Conflict, Climate Change, Criminality, Global Warning, Peace

### I. INTRODUCTION

Vimate Change Causes Conflict (CCCC), averred that climate change outcomes including rise in international sea levels due to glacial melt, unstable river-water flows (leading to floods) and intense rain storms, would cause largescale, deadly, humanitarian consequences in terms of human migrations fleeing flooded seacoast and push riverside or coastal peoples who depend on rainfall or irrigated agriculture to, in search of access to water and land, engage in fierce conflict with the host communities, consequently leaving behind tales of deaths among different families (Messer, 2010). The linkage between climate change and criminality is mystified, adumbrated and exemplified in several criminal activities by herders and farmers, terrorists or insurgents, bandits and rustlers, kidnappers, among others in different parts of Nigeria. It identified the implications of their actions and required deep scholarly offered recommendations on possible ways out of the quagmire.

### Crime and Criminality

Crime and criminality is unarguably the feature of all human societies. Although, the rate and incidence may vary from one society to another, it goes without saying that the phenomenon is prevalent and most often disrupts the smooth or proper functioning of any given society. Nigeria, in recent times, has persistently and consistently remained in the global map with an alarming negative image, which has promoted international global concern over the prevalence and consequences of enormous criminality in Nigeria in terms of its debilitating effects on global economy.

According to Schiiler (n.d), criminality is a style of strategic behaviour characterized by self-centredness, indifference to the suffering and needs of others, and low self-control. He opined that these strategies usually are risky and thrilling, requiring little skill or planning. They often result in pain or discomfort for victims and offer few or meager long-term benefits because they interfere with careers, family, and friendships.

These explanations on crime and criminality apparently fit neatly into criminal activities of the Boko Haram sect, Herdsmen, bandits, kidnappers, corruption, communal clashes and other crime related activities currently going on across the length and breadth of Nigeria, disrupting the peace and stability of the people. There is no doubt that these criminal elements have little to no regard for human suffering and needs and the disruption of relationships as witnessed in the many killings and destruction of properties in the last decade.

### Factors for Global Climate Change

Changes in the global climate are caused by two major factors namely, natural processes referred to as biogeographical and human activities referred to as anthropogenic. The biogeographical processes are the astronomical and the extraterrestrial forces which include changes in the orbital procession, that is the earth's trajectory movement, while the anthropogenic factor is the climate change which pertains to human activities with either of two consequences: emission of large amount of green-house gases into the atmosphere thereby depleting the ozone layer or activities that reduce the amount of carbons absorbed from the atmosphere. In concrete terms, the human activities that result in the former consequence include industrialization, burning of fossil fuel, gas flaring, urbanization and agriculture, while the latter include deforestation, alterations in land use, water pollution and agricultural practices. However, human factor is mainly to blame for the present and ongoing climate change and global warming (Adjugo, 2010). Five countries, viz: China, United States, Brazil, Indonesia and Japan have been identified as top

five most polluting countries globally; African countries tend to bear the brunt of the environmental pollutants emitted by these countries on a daily basis, and Nigeria is known be hardest hit. For example, flooding and heat waves in Nigeria in the recent time are caused by global warming and climate change (Nwaonicha, 2018).

Studies have shown that the effect of climate change is felt more in developing countries of Africa, including Nigeria, which like these countries, has low level coping capabilities. According to Odjugo (2010), Nigeria currently is bedeviled with varied ecological challenges driven by the ongoing climate change; and these challenges caused by climate change are concentrated more in the North-Eastern parts of the country. Odjugo (2010) further observed that Northern Nigeria is worst heat by the effect of climate change evidenced in the prevalence of desertification in States of Yobe, Borno, Sokoto, Jigawa, Kaduna, Niger, Nasarawa, Kogi, Kebbi, Kwara, Benue, and Katsina. The resultant effect is shortage of arable land for agriculture thus leading also to emigration and resettlement of people to safe areas with likelihood of communal clashes among herders and farmers that result in loss of lives and property.

Further studies (Yugunda, 2002; Yaqub, 2007; Adjugo, 2010) reveal that conflict between herders and farmers claimed over 196 lives in six northeastern states of the country between 1998 and 2006. Rural-Urban migrations of destitute because of drought and desertification have further compounded the problem All this in addition to other climate propelled crimes or conflicts such as the Boko Haram insurgency, kidnapping, armed banditry, amongst others, has continued to ravage the Nigerian nation with unprecedented consequences of enormous quantum of crime and criminality, which has continued to exacerbate poverty, homelessness, diseases, bad governance and absence of social justice.

### II. THEORETICAL FRAMEWORK

This study adopts the Social Conflict Theory as anchor. Social conflict theory, first enunciated by Karl Marx, and later expanded by Ralf Dahrendorf (1959) assumes that in every human society, some people have and own the means of production while others do not, and the have-nots serve the interest of the haves. In other words, there are two sets of classes in all hitherto human society, involved in opposing social relationships, that is, the bourgeoisie and proletariat. However, for Dahrendorf, the fundamental differences in class in terms of property ownership, should not be the case, rather, it is about the exercise of, or exclusion from, authority as the basis of class formation. Hence, he argues that "by social class shall be understood such organised or unorganised collectivizes, of individuals as share manifest or latent interests arising from and related to the authority structure of imperatively coordinated associations. It follows from the definitions of latent and manifest interests that social classes are always conflict groups" (cited in Tittenbrun, 2013). On this score, Dahrendorf holds that class conflict pertains to situations of struggle between authority holders and non-holders, who attempt to control or dominate the have-nots through the instrumentality of coercion and violence.

The major assumptions of conflict theory are as follows:

- i. Human interactions result in conflict
- ii. Conflict and change are normal and inevitable in society
- iii. Competitions over scarce resources (e.g., money, leisure and sexual partners, etc), is part of all social groups. If everyone had the resources they needed conflict would not exist
- iv. Inequalities in power and rewards are built into all social structures. Resources are scarce and groups will always compete over these resources
- v. Inequalities exist in varying degrees with people having different amounts of resources; hierarchies exist
- vi. Macro changes occur as a result of competing interests rather than through adaptation. It is often abrupt, revolutionary rather than evolutionary.

Social conflict theory thus, is an approach which highlights inequalities in human society in the distribution of power, authority, goods and services, opportunities and privileges.

Conflict between two classes or groups may arise for different reasons. For example, the conflict between the herders and farmers is over scarce resources including water and arable land; and that between the society and the insurgents (Boko Haram) is over class, identity, ideology, values and religion, in which case the government that has power or authority wields the big stick in quest to crush the insurgents.

### III. METHODOLOGY

This study relied on documentary approach. Therefore, it made use of secondary data sourced from online publications such as journals and agency reports, which were then content analysed, because of the paper's reliance on secondary source data.

The Ontology of Climate Change: Nigerian Perspective

Ontologically climate change is more than "one thing;" it is real and multifaceted and comprises varied values, needs, and consequential behaviours capable of destabilizing the entire ecosystem including human inter-relationships. As Jan Inglis stresses:

Rather than being "one thing," climate change is a complex of complex issues made up of many interconnected sub-issues at many scales worldwide from lawn maintenance and building codes to population growth, subsistence practices of clearing old-growth forests, and gas flaring practices in oil processing, to terrorist acts and countless others—all reflecting many different values, needs, and resulting

behaviors. Responses to each such cause require different types of focused attention— impossible when we keep referring to this generalized topic. (cited in Esbjorn-Hargens, n.d).

In this light, climate change and its paradox, refer to an increase in average global temperatures. Thus, distinguishing between climate change and global warming, the United States Environmental Protection Agency defines climate change as "any significant change in the measures of climate lasting for an extended period of time," while global warming refers to "the recent and ongoing rise in global average temperatures near Earth's surface . . . caused mostly by increasing concentrations of greenhouse gases in the atmosphere, which trap infrared heat causing a warming effect" (Environmental Protection Agency, 2016, cited in Lytle, 2017). Climate change also comprises an increase in ocean acidification, increase in extreme weather events, shifting ecosystem characteristics, and varying precipitation patterns, that could cause detrimental natural disasters witnessed in the form of massive floods, hurricanes, droughts around the world (Lytle, 2017).

Aside the environmental and natural implications of climate change, other human or anthropogenic consequences abound in the Nigerian context, such as insurgency, herders/farmers clashes, armed banditry, kidnapping and sundry security threats. These security threats pose serious humanitarian consequences in terms of the upsurge in refugee status and internal displacement witnessed everywhere in Nigeria. Expanding the ontological boundaries by focusing on people's vulnerability and resilience and its meaning in regard to how climate is experienced and what it means becomes imperative.

# IV. THE NEXUS BETWEEN CLIMATE CHANGE AND CRIMINALITY IN NIGERIA

The United Nations noted that all countries of the world are experiencing first-hand drastic effects of climate change which threatens irreversible consequences if left unattended to; noting that the annual average losses from the effects of climatic change such as earthquakes, tsunamis, tropical cyclones and flooding amount to hundreds of billions of dollars, requiring an investment of US\$6 billion annually by 2020 to address the needs of developing countries and help mitigate climate-related disasters (UNDP, 13 Climate Action, 2019). The United Nations Development Programme (UNDP, 2016) reported that while Africa is the lowest contributor of global emissions, it is the most vulnerable continent to climate change living majority of its population relying on the land for subsistence and economic activity. Thus, according to the 2015 UN Environmental Programme's Adaptation Gap Report, Africa would require between US\$20 - 30 billion dollars annually over a period of 10 - 20 years to meet its climate change adaptation needs (UNDP, 13 Climate Action, 2019).

Studies have shown that climate change promotes strain, reduces social control, weakens social support, contributes to characteristics conducive to crime and criminality, increases certain opportunities for crime, and creates social conflict as consequence (Messer, 2010). CCCC proponents argued that climate change would multiply the impacts of population growth and environmental degradation, leading to confrontations and conflicts, especially in societies with corrupt leaders and poorly governed places in the developing world (Messer, 2010). Messer averred that "the relationship between climate change and violent conflict is complex, country-specific, with patterns that are localized within nations."

# V. CRIMINOLOGICAL CONTEXT IN CLIMATE CHANGE-CRIMINALITY NEXUS IN NIGERIA

The linkage between criminality and climate has long been postulated by scholars such as Dagaci, (2012) who opined that significant ecological changes would lead to water wars over increasing scarcity, land conflict over decreased arable and livable land. The consequences of climate change have in a long while been concentrated in conflict and crime prone regions of the world that continue to experience high insecurity and underdevelopment. Additionally, population explosion and urbanization couple with inequitable access to and shortage of land, and resource depletion have been generally predicted to worsen, thereby posing precarious challenge to the stability of rural and urban living (Conroy, 2006).

Figure 1 depicts conflict dynamics arising from climate change in any part of the world. It also shows the relationship between climate change and criminality; and the overall impact of same on the quantity and quality of land resources, populations, institutions and patterns of social behaviour.

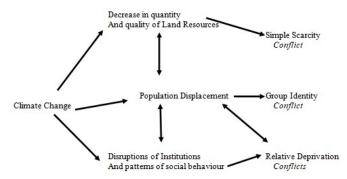


Figure 1: Types of Conflicts Likely to Arise from Environmental Change. Source: Homer-Dixon, 199, cited in Land Conflict, Climate *Change, and Violence in Nigeria: Patterns, Mapping, and Evolution by Stone Conroy, 2006*).

The nexus between climate change and criminality in Nigeria, typified in criminal activities involving clashes between herders and farmers in the middle belt in particular and other regions of the country generally, terrorism in the northeast, armed banditry in the northwest, the spate of kidnapping across the nation, among others, show the extent to which

changes in climate has directly and/or indirectly precipitated crime and criminality and threatened social cohesion and peaceful and harmonious living within the country. The areas in which adverse impacts in terms of criminal activities are felt are discussed below.

#### Herder/Farmer Crisis

Changes in the global climate have caused serious conflicts between indigenous people and settlers in Nigeria. The migratory habits of the Fulani Cattle breeders, who move in search of fresh water and pasture for their livestock by encroaching into people's farmlands, have often resulted in clashes between them and the community land owners. The Fulani ethnic nationality, perhaps the largest semi-itinerant group on the planet (Naziru, 2016, cited in Asueni and Godknows, 2019) is found and spread across West and Central African countries of Gambia, Mali, Mauritania, Sierra Leon, Burkina Faso, Guinea Bissau, Cote d'Ivory, Togo, Nigeria, Niger, Senegal, Benin, Ghana, Sudan and Cameroon. A great number of this ethnic group are found in Nigerian villages, towns and cities, living as semi-nomadic herders and to a large extent engaged in proportionately violent crimes and criminality as seen in the number of killings carried out by the herders. In most of these countries including Nigeria, the Fulani are known to be pastoralist, with their main occupation being nomadic farming, cattle, goat and sheep herding. The Fulani ethnic group, who own most of the cattle in the country, contribute about 90% of the meat industry in Nigeria; and contribute 3.2% to Nigeria's Gross Domestic Product (GDP), in addition to being the major providers of milk (Abass, 2012, cited in Asueni and Godknows, 2019). However, the negative actions of the herders negate the huge contributions they make to national economic development in Nigeria. The frequent attacks on the farmers and other innocent citizens in the last couple of years by the herders have assumed an alarming dimension. This is evident in the crimes against persons in terms of murder and injuries inflicted by the herdsmen on people in different communities across most of the Northern States and some Southern States. The situation, as stated earlier, that impinge on peace, security and unity of the nation, has set the country backward developmentally in all ramifications (Ndubuisi, 2018).

The herders who even though do not move of their own volition, but forced to do so by climatic effects such as deforestation, desertification and lack of water, often come into contact with the locals who see the herders as invaders and therefore unwelcome. Asueni and Godknows, (2019) observed that climate change in Northeastern Nigeria has forced migration of Fulani Herdsmen from up North to down South, where they could access fresh water bodies and other resources needed to sustain their cattle. The migration out of their habitual residence or grazing area to other parts of Nigeria has often led to violent conflict and the death of thousands of people in its wake. Climate change has unequivocally been linked to increased insecurity in terms of crime and criminality as evidenced in conflicts and killings

involving herders and farmers, in most parts of Nigeria (Asueni and Godknows, 2019). This trend has prompted several agitations such as cattle colony, ranching and the RUGA (Rural Urban Grazing Area) scheme in recent times, notably by the Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN), which advocates for the social, political, economic, and cultural integration of Fulani in communities where they settle (Awogbade 1987, cited in Shehu, et al. 2017). The question that should agitate the mind is: Is it enough to be culturally integrated into host communities, without making sure that mechanisms are put in place to forestall any future clashes between the settlers and the land owners? This requires scholarly and genuine innovative compendium of ideas that need to be muted so as to promote the unity and peace of this great nation.

### Terrorism/Insurgency

Climate change is arguably a contributor to the spate of global terrorism (Lytle, 2017). The relationship between climate change and terrorism might not be direct; however, the latter is the unintended consequences of the former. How is it so? This question will be answered using the Boko Haram terrorism in Nigeria as an example of how climate change necessarily creates the fault lines for terrorist activities within a country. A Study by Lytle (2017) on "Climate Change as a Contributor to Terrorism: A Case Study in Nigeria and Pakistan," revealed that in Nigeria, climate trends and agriculture influence terrorism trends in the country, particularly the Boko Haram insurgency. It shows that climate change creates the platform for terrorism generally to thrive. The finding of the study agrees with a report commissioned by the German government which showed that some 30 million people across Nigeria, Chad, Niger and Cameroon are competing over a shrinking water resource, and reiterated that chronic drought around Lake Chad in particular, is reinforcing terrorist group, Boko Haram's grip on the region. This report further confirms the belief that climate change feeds global terrorism. Further, as climate change around Lake Chad contributes to resource scarcities thereby increasing local competition for land and water, three conditions are favourable to Boko Haram's expansion in the area: 1) the group can operate more easily in these fragile areas where the State has little authority and suffers from lack of legitimacy; 2) affected population is more vulnerable not only to negative climate impacts but also to recruitment by Boko Haram; and 3) Boko Haram use natural resources such as water as a weapon of war or inhibit access to natural resources (David, 2017).

According to Lytle (2017), the narratives around the impact of climate change as driver of social and political instability was no longer new, noting that many scholars have claimed that climate change had triggered terrorism and internal conflict in most African countries with Nigeria as a case study. The prevalence of hunger and starvation in the country because of people's inability to access arable land for crop production since their original lands have been washed away by floods

and erosion, for example as was the case in Kogi State and Abuja, has paved way for crime and criminality among different groups of people. As the popular cliché in Nigeria, "man must wak" goes, idle and hungry Nigerians are forced to join criminal gangs such as the Boko Haram terrorist group who often lure the young people with food items, gifts and money and sundry inducements. Perhaps that prompted Oluremi Tinubu, as the Vice Chairperson of the Nigerian Senate Committee on Labour, Employment and Productivity, to state that "the problem with Nigeria and terrorism is the level of hunger" (Lytle, 2017). Similar scenario also plays out in the Southern parts of Nigeria, especially in the Niger Delta, where pollution from gas flaring infiltrate the ecosystem including flora and fauna, producing "black rain" which destroys crops and induces health problems such as asthma, and where frustrated youths are forced to join militant groups (Lytle, 2017). It should be noted that is not hunger for its sake but hunger resulting from the effects of climate change which makes it practically impossible for people to access farmlands because these have been gradually undermined by floods over the course of time (Climate Home News, April 4, 2017). Also, as noted earlier, climate change does not directly cause terrorism but coupled with other challenges, such as poverty, inequality or marginalization and wanton corruption especially in nations like Nigeria, Niger, Chad, etc, it can provide a fertile ground for non-state armed groups or actors to thrive, and further pose challenge to state authority or actors (Climate Diplomacy, n.d)

### Armed Banditry and Cattle Rustling

Cheserek, Omondi, and Odenyo (2012) have defined cattle rustling as "the act of forceful raiding of livestock from one community by another often leaving behind destruction of property and loss of lives" (cited in Momale, 2016). The early form of rustling significantly affects the livelihoods of families, heavily impacting on women and children, and in some societies associated with kidnapping of girls, rape and destruction of properties. This concept, according to Cheserek et al (2012) differs from cattle raids which involves stealing livestock from one community by another without destroying property or killing people, which was the practice among the Maasai and Karimajong in Eastern Africa. They stated that cattle rustling is generally a large scale theft of cattle through violent means and often involves the use of weapons. Thus, cattle rustling are regarded as a form of armed banditry, which is wider in scope and including different forms of crimes such as highway robbery and gang-like invasion of settlements to confiscate wealth and properties. Cheserek et al (2012) have identified two forms of cattle rustling existing in human recorded history:

i) Rustling of livestock by opposing ethnic groups or clans – This form of rustling often involve large number of people from a defined ethnic or family background. The purpose of this form of rustling is to build-up the stock of livestock wealth for the ethnic group or clans. The rustled cows are shared

- among the family or group members for breeding. In some situations, part of the cows may be given back to families or groups whose animals were previously rustled by the opposing parties. Examples of these forms of rustling are common in the Greater Horn of Africa, particularly in countries including Somalia, Kenya and Uganda.
- ii) Rustling of cattle by criminal gangs or thieves who sell-off the stolen cows The purpose of this form of rustling is purely criminal; it is to steal the cows and sell them off for monetary gains. For this form of rustling to exist, there must be ready markets which are built around powerful cartels with wide networks and support from state institutions, particularly security agencies. This is mostly found in nations in North and Central Africa.

Cattle rustling as an age-old and deeply entrenched feature of pastoralist livelihoods, which fostered competition between groups that found themselves in harsh, delicate environments, and served as a means of primitive accumulation of a cowhead in the context of subsistence and commercial pastoralism, is an ancient practice dating back over seven thousand years (Blench, 2004; Rangers and Osborne, 2006, cited in Egwu, 2016). Banditry involving cattle rustling has occupied a central place in the Nigerian crime lexicon especially in the last decade. The phenomenon has posed serious threat to public safety and security in the country, leading to loss of lives, human injury, population displacements, and loss of many cattle, that does not augur well for the collective wellbeing of the herding communities (Shehu, Victor and Binta, 2017).

Rural banditry associated with cattle rustling driven by different needs and factors among which is climate change, currently poses serious concern for public policy formulation in Nigeria. It is a phenomenon that involves the practice or habit of stealing cattle and animals from herders, or the raiding of cattle from the ranches. It has increasingly become an economically-based form of criminality perpetuated by informal networks (Egwu, 2016). Being an age-old practice even among Nigerian pastoralist groups and communities, and driven by different needs ranging from need for cash, some ethnic group's need for meat, or as a means of revenge for damaged crops, it still does not imply that rustling is or should be condoned, hence it has been criminalized by the penal code of Northern Nigeria as an offence against the State.

The last decade has seen cattle rustling transformed into a vicious criminal activity, transcending a quasi-cultural practice that had important livelihood enhancing functions. This is attested to by the new criminal gangs, armed with sophisticated weapons, who have reportedly carted away cattle in commando-like operations that have resulted in the killings of herders by security operatives and farmers alike (Egwu, 2016).

A study conducted by Shehu, Victor, and Binta (2017), on *The Menace of Cattle Rustling and Banditry in North-West Nigeria: A Case Study of Katsina State*, revealed that frequent drought and famine in the area accounted for the menace of cattle rustling and banditry. The study also found that among the several implications of the criminal activities of cattle rustling and banditry were, deaths, immigration, internal displacements, sexual assault and rape, poverty resulting from destruction of source of livelihood, early marriage and polygamy made possible by earnings from rustled cattle or raided livestock by youths. This corroborates the findings by Egwu (2016), which indicated that rural banditry is accompanied by rape, kidnapping, organized attacks on villages and communities, and looting.

Banditry and cattle rustling is a criminal enterprise of very high magnitude that has been on the ascendancy in Nigeria, and threatened the livelihoods of numerous rural and urban communities. The menace has persisted despite efforts by the Nigerian Government to tackle it. Egwu (2017) noted that the Nigerian Police, has constituted a "Task Force on Cattle Rustling and Associated Crime", charged with the arduous responsibility for preemptive prevention of associated crimes within the country.

### VI. CONCLUSION

In conclusion, the Nigerian government must continue to promote policies and programmes constituting palliative measures in tackling the global climatic changes so as to enhance unity, peace and progress of the Nigerian citizens. Consistent and sustainable development programmes of good governance devoid of wanton corruption and criminal neglect and marginalization must be resisted by Nigerian leaders. Basic social services and amenities that would reduce a suffocating and sophisticated complexity of poverty and inequality among human race must be tackled head-on. Peace and harmony can only be achieved in a society with refined characters and persons that are of patriotic and genuine followership of humanity. There is the need also for consistent advocacy for mutual cohesiveness among diverse ethnic nationalities in Africa. Nigeria project is only doable and possible if there is a genuine sense of commitment of social justice by our leaders. Crime and conflicts have destroyed nations across the world due to its excessive alarming recklessness in the life of people in such society. There is no nation in the world that can ever be on the path of progress if the ideologies and philosophies are not enlightened, refined, civilized and developmental.

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