

Rethinking the Lake Chad, Herder-Farmer Conflicts and Food Security in Nigeria

Kenneth Nnamdi Dim¹; Joseph O. Duhu² & Elias C. Ngwu¹

¹Department of Political Science; University of Nigeria, Nsukka ^{2.} Department of Political Science, Caritas University, Enugu Correspondences: elias.ngwu@unn.edu.ng

Abstract

Climatic change poses threats to human life and livelihood systems. It is a multi-dimensional phenomenon with significant deleterious socio-economic impact. One of the impacted areas of the contemporary climatic change is the Lake Chad in North Eastern Nigeria and Sahel region of West and Central Africa. Reported cases of dislocation of the ecosystem of the Lake Chad environment are on the increase and worsening. The effects have led to perennial conflicts between herders and sedentary farmers, threatens food security as well as overall human security and the security of the Nigerian state. The thrust of this paper is to interrogate the lingering herder-farmer conflicts in the Lake Chad basin, Nigerian government's responses and the implication for food security in the country. Data for the paper were derived from documentary sources and analyzed using content analysis. The human security approach was adopted as framework of analysis. We argued that in view of government's weak and uninspiring responses to challenges posed by the shrinking of the Lake Chad and the resultant conflicts between herders and farmers, the government's avowal to ensuring food sufficiency for its citizens through local production is imperiled. We, therefore, urge a rethink and rejigging of government's climate response strategy generally and its approach to the resultant violent clashes between herders and farmers.

Keywords: Climatic changes; environmental variation; Lake Chad; herders-farmers conflicts; food security.

Introduction

Environmental variation is a long-term change in the average weather patterns that have come to define earth's local, regional and global climates. These variations have broad range of observed effects. The climate on earth has been changing since it was formed about 4.5 billion years (IPCC, 2007). Natural forces have been the causes of these variations which include volcanic eruptions, shifts in earth's crust, greenhouse gases etc. These gases act as a warming blanket, around the earth, known as the greenhouse effect, which is critical to human survival. However, in addition to natural influences, scientific consensus maintains that human activities have contributed significantly to environmental change. Human exploitation of the earth, through burning of fossil fuels, agriculture, industrial processes and deforestation add more greenhouse gases into the atmosphere, trapping more heat, and instead of keeping earth at warm, stable temperature, the greenhouse effect is heating the planet at a much faster rate, and this enhanced greenhouse effect is the main cause of climate variation. The International Panel on Climate Change stated over 95 percent of human activity is the main cause of climate change (IPCC, 2007).



One of the most impacted locations by environmental change is Lake Chad. Lake Chad is located in the Sahel zone of West and Central Africa at the conjunction of Cameroon's Far North region, Chad's Lac and Hadjer-Lami's regions, Niger's Diffa region, and northern Nigeria's Borno State. Historically, Lake Chad has ranked among the largest lake in Africa, though its surface area varies greatly by season, as well as from year to year. It is dotted with numerous islands, coalesce into larger land areas during periods of extremely low surface levels. The Lake is fed mostly by Chari-Logone River system, Komadugu-Yobe river and Yedsaram/Ngadda river which accounts for about four-fifth of the inflow. Its volume reflects local precipitation and the discharge of its catchment area balanced against losses through evaporation and transpiration (Onuoha, 2008, Abdulbarkindo & Alupse, 2015, Uche et al, 2015).

Lake Chad was an active centre of agriculture, livestock production, fishing and cross border trade because the water levels allowed for prosperous livelihood with plenty of fertile farmland, and pasture. The fertile lands around the lake attracts populations from drier areas of Sahel, as the lake catchment area doubled in population from 13 million to 26 million between 1960 and 1990 (Conflict Report,2020). Unfortunately, with the passage of time, in the 1970's and 80s, production of these agricultural activities has been adversely affected by the decline of the forested areas, caused by drought and aggravated by explosive growth of cattle populations. Persistent drought conditions in the Sahel shrank the lake significantly. The water body of the Lake Chad has contracted by 90 percent due to the effects of climate variation, over use and unplanned irrigation, putting increased pressure on the dwindling resources (Uche et al,2015). Moreover, as the hydrological changes in the Lake Chad became unprecedented, the region experienced most substantial and sustained reduction in the rainfall events recorded anywhere in the world (IPCC,2001), and in 2003, United Nations Environmental Program classified Lake Chad region as among the ten most water impoverished locations in the world (UNEP, 2003).

The dwindling of the lake natural resources had devastating impacts on the side of Nigeria, and because of the way it has shrunk dramatically in the recent years, it has been labeled ecological catastrophe by the Food and Agriculture Organization of the United Nations (F.A.O, 2003). The human population expansion and unsustainable human water extraction from Lake Chad have caused several natural species to be stressed and threatened. The competition over the scarce resources (land) developed into bitter rivalry among the groups especially the herders and farmers. The shrunk of the lake has also caused tensions among the dwellers in the Lake Chad.

The replenishment capacity of the lake's fertile soil has greatly diminished, and competition for resources is exacerbated by this decrease in arable land, and scarcity of water (Coe & Foley.2001). The receding waters of Lake Chad have increased the frequency of contact between livelihood systems as farmers move closer to the lake's shoreline to cultivate newly exposed fertile lands and the herders move their livestock closer to water sources, inciting additional competition for already limited land and water access (Onuoha, 2010). As tension brews, farmers and herders want the water for their crops and livestock and are constantly diverting the water. The water diversion slowed or halted in order to prevent continuing decline



in water levels resulting in further strain on the lake. These factors have caught the herders and farmers in "conflict trap".

Growing numbers of local, international agencies and policy makers have expressed concern over the environmental change and the shrinking of Lake Chad. There is a range of debates in literature focusing on possible way in which water can drive cooperation or conflict and insecurity (Le Billion, 2001). Some analysts argued that changes to the natural environment constitute a potential threat because security is essentially about the well-being of the people (Homer-Dixon, 1999). A contrary perspective posits that given the increasingly scarce situation of water, and with lack of suitable substitute for most of its uses, a causal relationship exists between water scarcity and conflict (Hauge and Ellingsen). Remans (1995) opined that competition for scarce water can brew social, political tensions and even clash. Reports had it that on 37 occasions, the State of Israel and its neighbours, Palestine and Jordan fired gunshots, burnt houses, blew up dams and undertook some form of water-related military and political action (Gleick,2008). In Rabdore village in Somalia, during their three years drought between 2002 and2005, about 250 people lost their lives on account of water induced clashes (Wax and Thomason, 2006).

There is no doubt that factors identified in the literature are compelling, but this study recognizes that limited attention is given to vulnerability thinking in linking water to conflicts. More so, Lake Chad Basin issue is complex and there is little effort in literature to systematically interrogate the ethnic dimensions of conflicts between the Fulani herders and their host farmers and its implication on food security. This study is necessitated by the conflict trap of the nomadic herders and farmers occasioned by climatic shocks of natural resources of Lake Chad, the concomitant food insecurity, and government response. It examined how government's non-proactive responses to the challenges of posed by the shrinking of the Lake Chad aggravated the conflicts between herders-farmers and jeopardized the drive towards food security in Nigeria. It argued that tepid government responses to the shrinking of Lake Chad escalated herders-farmers conflicts, reinforced poverty, food insecurity and by implication brought about the festering of other crimes and criminalities within the Lake Chad region.

Methodology:

This study deployed documentary method of data gathering. Documentary method is most suitable for the study because the information required are already in the public space. What is required is to interpret, analyze, illuminate and extract valuable information in order to draw inference from the available evidence. This method is, therefore, used since what is required is for the analysis of the issues that are already in written documents, and not personal opinions of individuals. Therefore, this study relied on secondary data sources, such as books, journal articles, periodicals and other relevant materials that dwell on climate change, Lake Chad and farmers- herders crisis.

Content analysis was applied in the analysis of the data generated. The rationale for its adoption is to enable the researcher critically examine the content of the document in order to comprehend its ideas, concepts and quantify the message it relates (White et al, 1966). Content



analysis, however, is descriptive, interactive, and multi-dimensional, hence it is suited for the analysis of documentary evidence.

Human security is a theoretical framework for understanding global vulnerabilities. The concept was developed after the Second World War. The major proponents of the framework were Mahbub-ul Haq and Surin Pitsuwan. They challenged the traditional notion of national security through military security by arguing that the proper referent for security should be at the human rather than national. The concept gained wider currency through 1994 Human Development Report of United Nations Development Program. It was a milestone publication in the field of human security. The approach identifies widespread and cross-cutting challenges to survival, livelihood and dignity of people. These identified threats include, economic, food, health, environmental, personal, community and political security. The framework is a call for "people-centred, comprehensive, context-specific and prevention-oriented responses that strengthen the protection and empowerment of all people". The theory reinforced United Nations support to Member States in strengthening resilience to climate change and natural disasters, promoting peaceful and inclusive societies, addressing the underlying causes of persistent poverty, bolstering the transition from humanitarian crisis to longer term sustainable development.

We adopted this framework because it advocates a holistic approach in addressing security challenges of human population. Prevention is at the heart and core value objective of human security. It addresses the root causes of vulnerabilities, material and existential conditions for maintaining a dignified life. Vulnerabilities, as used in this context means the characteristics of a region, state or people and the situations that define and influence their capacity to adjust to, resist and recover from the impacts of environmental change or water degradation (Wisner et al, 2004). Additionally, it focuses attention on emerging risk and emphasizes early action. It strengthens local capacities to build resilience, and promotes solutions that enhance social cohesion and advance respect for human rights and dignity.

Shrinkage of Lake Chad and Herders – Farmers Conflict:

The root of the conflict lies in the forced southern migration, due to drought, of herdsmen from their traditional grazing grounds, mostly in the northeast Nigeria. As the lake shrank, large numbers of herders had to search for alternative pastures and sources of water for their cattle leading to encroachment on settlement and farmlands in North Central and Southern states of Nigeria. The concomitant effect of the drought, manifesting in diminished arable land resulted to poor rearing and production capacity, causing dislocation of the ecosystem, human communities, and thereby resulting to increased pressure on the natural resources of the states south wards (Onuoha, 2008, Obaji, 2018). This movement of the herders into these states brought culture conflict because the herders are predominantly Muslim and farmers largely Christians. As the ideals, beliefs and values of the herders differ from their host communities, ethnic and religious extremists exploit the situation. In trying to exploit the land resources and water, these Fulani herdsmen and the militia engage in ethnic and sectorial conflict with their host communities. To worsen the situation is the obvious itinerant nature of rearing livestock



by the herders, and their livestock feeding on crops of the host communities who are predominantly farmers (Audu, 2014).

The grazing of the livestock of the herders on the crops of the host farmers deprive the communities their source of livelihood. Livelihood loss can lead to poverty, which is a traditional driver of conflict, and insecurity engenders food insecurity. The asymmetrical conflict results in killing, maiming and raping of women by the herders in the farmland. These farmers for lack of defending themselves withdraw from their far- away farm land and embark on subsistence production, planting lower-value, quicker-maturing varieties closer home. In many cases, fear of insecurity and threat of being kidnapped has prevented farmers from fully engaging in crop production. Farmers abandoned their farms for fear of attack and grazing of their crops by livestock (Audu, 2013).

Reports of the heinous and dastardly acts of these herders reverberate across the North-Central and Southern states. They have constituted themselves into a great threat to national security by their brazen and orchestrated destruction of crops resulting in avoidable crises and bloodletting. The conflict and intolerance among the nomadic herders and their host farmers have deteriorated to unimaginable level of crises resulting in countless deaths among the villagers with the attendant reduction in the population of these peasant farmers. Hence, it is important to note that these violent clashes have direct impact on the lives and livelihood of those involved and lead to the displacement of the economic production community. In most cases, these incessant and frequent violent clashes lead to reduction of output and income of the crop farmers, and this tends to adversely affect their savings, credit repayment ability, as well as food chain and security of urban dwellers that depend on these farmers. The clashes most times affect the women who are turned widows. All these killings and maiming reduce agricultural labour force which pose huge challenges for food production and security (Olatunde, 2018).

To illuminate the magnitude of the crime and criminality being perpetrated by these herders, on Tuesday, February 9th, 2016, in Ugwueshi community in Agwu council of Enugu State, the herders invaded their farmland with their livestock and destroyed crops. The same destruction was recorded on April 25th, 2016 on the seven communities in Uzo-Uwani council of Enugu State. These communities are Nimbo, Ngwoko, Ugwuijoro, Ekwuru, Ebor, Enugu-Nimbo, Umuome and Ugwuachara. In the words of Godwin Nwobi, the traditional ruler of Ugwueshi "all the crops we planted have been uprooted. The steal the crops and bring their cows and destroy every other thing in the farm aside raping our women" (Guardian, April 24th, 2016 p.14). In corroboration of the preceding viewpoint, (Duru, 2016) opined that in a violent clash between the herdsmen and farmers in February, 2016, about 40 people were killed, 100 were seriously injured and 2,000 were displaced. Also in March, 2016, about 500 people were killed by rampaging herdsmen following a siege on Agatu Local Government Area of Benue State. The affected communities include Akwu, Adagbo, Okokolo, Ugboju, Odugbeho, Obagaji and Egba (Premium Times, March 12th, 2016).

Reacting to January 1, 2018 crisis where 73 people were killed in one day, Samuel Ortom the Governor of Benue State said that, "our concern is not just the herdsmen militia, but with those who hire the killers as mercenaries, those who bring them and show them our



ancestral lands for them to turn into killing fields". Continuing, our people have suffered the attacks and killings that appears more like pogrom masked in terrorism. He further opined that this violence has been aided by Federal Government's security forces inability to swiftly respond to the early warning of the impending attacks, and lackluster attitude to prosecution of the offenders. In the same vein, International Crisis Group (2018) reports that the herdersfarmers crisis claimed over 1300 lives in first quarter of 2018 alone, and in agreement, Amnesty International (2018) asserts that over 2000 Nigerians have lost their lives to farmers-herders conflict between January and October 2018. In addition, to thousands of lives lost, the communities that are victims of the attacks have been thrown into humanitarian and economic crises of enormous proportions. Over 180,000 people were registered in eight officially designated Internally Displaced Persons (IDP) camps in most part of 2018; while over 500,000 displaced people have been living with relatives and in uncompleted buildings and public spaces across several Local Government Areas (Ortom, 2019).

Table1: Some of the attacks by the Herders (Incidents and casualties)

DATE	CASUALTIES
February 9th, 2016	Herders invaded Ugwueshi community in Agwu Local Government Council of Enugu State and their cattles destroyed the host community's crops. (Guardian, April 24th, 2016) p. 14.
March, 2016	500 People Were Killed By Rampaging Herders Following A Siege On Agatu Local Government Area of Benue State. The affected communities Akwu, Adagbo, Okokolo, Ugboju, Odugbehu, Obagaji. (Premium Times, March 125 th , 2016).
April 2016	Fulani herdsmen invaded seven communities in Uzo-Uwani council in Enugu State, and destroyed their crops with their cattles and raped their women. These communities are Nimbo, Ngwoko, Ugwuijoro, Ekwuru, Ebor, Enugu-Nimbo, Umuome and Ugwuachara. Saturday Sun, April 30 th , 2016) p. 8.
April, 2016	Fulani herdsmen attacked two villages and killed 15 people in Gashaka Local Government Area of Taraba State. (Punch, April 13, 2016.
April, 2016	Herdsmen swoop on Olu Fale's farm after the previous attack, killed the security guard and destroyed the crops in the farm in Ondo-State.
August, 2016.	Herdsmen numbering about 50, armed with matches and rifles attacked Ndiagu community of Attakwu, Akegbe-Ugwu in Nkanu-West Local Government Council of Enugu State
October, 2016	Armed Fulani herdsmen opened fire on villagers who attempted to stop their cattle from grazing on their farm lands in Umuekune, Irete in Imo State. (The Sun, October 30th, 2016).
January 1st, 2018.	73 people were killed and about 500,000 displaced in Benue State by the invasion of Fulani armed herdsmen (Ortom, 2019).

Source: Authors' compilation from the sources cited in the table.

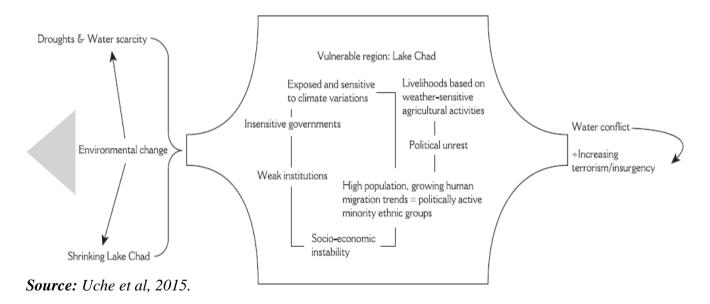


Across the North-Central and most southern Nigeria in the past few years, not a few are those that have expressed worry at sudden, glaring temerity of the herders. In some cases, the herders have discarded their signature herders stick, replacing them with assault rifles. According to Olusegun Mimiko, the former Governor of Ondo State, "These wanton destruction, audacious incursions into other people's territory cannot continue for too long. The herders just go to farms and devastate the farms. Some farmers have been turned to perpetual debtors because the inputs are from the banks" (Saturday Sun, April 30th, 2016 p.4).

Security implications of Lake Chad shrinkage

As the lake experienced substantial and sustained reduction in rainfall, the impact of the drought and water scarcity caused mass movement of the herders from their traditional grazing land to traverse long distances in search of green pastures, vacuum was created. The figure below demonstrates the aftermath and impact of lake shrinkage. The environmental change, drought and water scarcity of the lake triggered large-scale eco-system disruptions and social dislocation. And as nature abhors vacuum, Boko Haram, and other criminal elements moved in and created a base and a haven in the area, as the most of the traditional populations moved out. The group's activities in the northeast and later bandits in the north west of Nigeria had a cumulative adverse effect on the conflict in the North-central states (Obaji, 2018).

Figure: 1 A Linked environment- vulnerability – conflict nexus for Lake Chad.



Arising from water shortages of Lake Chad is other criminal activities like cattle rustling and kidnapping. Reports have pointed to the rising incidence of cattle rustling in the north-western states of Zamfara, Katsina, Kebbi, Jigawa etc. Contemporary rustling and kidnapping have been associated with Boko-Haram in the north-east, and the bandits in the north-west. With



mounting insecurity in these geo-political zones, from 2009 to 2018, Nigeria's budgetary defence allocation totaled about \$21 billion was substantially went towards procurement of arms, ammunitions and logistics in fighting Boko-Harm insurgency and the criminal bandits (Conflict Report, 2020). As most people have abandoned farming, livestock rearing because they are no longer sustainable in this area, Boko-Harm has capitalized on the loss of livelihoods and economic misery to recruit young people into their ranks, and other vulnerable people are driven into risky behaviours such as courier for drug trafficking and arms trading. The improvised explosive devices (IEDs) put in place by Boko Harm on farm land are limiting agricultural activities. Between January 2016 and March 2018, 439 deaths resulted from landmines and unexploded bombs in the northeast Nigeria (Owonikoko, 2020). Based on these, authorities restrict the use of fertilizers for agriculture as they can be used to produce improvised explosive devices. According to Armed Conflict Location and Event Project (ACLED), more than 5,000 people have been killed in the conflict between May, 2011 and July 31, 2020, and since 2009, more than 10 million people have been deprived of attaining their livelihoods in farming, and over three million people were food insecure (Abhijit et al, 2021).

Shrinkage of Lake Chad and Food Insecurity

Agricultural activity is a significant part of the economy of Lake Chad and engages 60 percent of the population. Conflict and climate variability has limited land resources and is escalating conflict among the communities of the Lake Chad. According to a report by Center for Strategic and International Studies, throughout the Northeast of Nigeria, insecurity has resulted in the displacement of a total of 2.6 million people and acute food insecurity for 5 million people. Food production has been severely affected by herders-farmers conflict. Sorghum production has decreased by 82 percent, rice production decreased by 67 percent, and millet production reduced by 55 percent between 2010 and 2015. An assessment conducted by the Federal Government showed that between 2014 and 2015, the country loses \$3.7 billion in agricultural revenue as a result of herders-farmers conflict primarily in Borno State due to climate variability of the Lake Chad and the insurgency of the Boko Haram (CSIS, 2020). The environmental variability, climate change and human pressure on water resources, has made the lake to shrunk by 90 percent from 25000 square kilometers in 1963 to less than 1500 square kilometers in 2001 (Usigbe, 2019). In his study of Lake Chad region, a respondent averred, this lake is very dear to our hearts, the water used to be what we depend on for farming, fishing and herding. Since the water has dried up, sustaining our livelihoods has become so hard. We can hardly farm now and we recorded regular death of our livestock because of lack of fodder and water to fatten them (Owonikoko, 2020).

To illuminate the crisis situation of the Lake Chad and the concomitant food insecurity it has generated, the Director General of Food and Agriculture Organization of United Nations, Graziano da Silva in 2017, stressed that "This is not only a humanitarian crisis, but it is also an ecological one. This is a war against hunger and poverty in the rural areas of the Lake Chad Basin". Further, agriculture including livestock can no longer be an afterthought. It is what produces food and sustains the livelihood of about 90 percent of the region's population. Some



seven million people risk suffering from severe hunger in the Lake Chad, which in incorporates Northeastern Nigeria. Fighting and violence have caused much suffering, the impact of environmental degradation and climate change including repeated droughts, are exacerbating the situation. These clashes create as well as reinforce circles of poverty, hunger and deprivation especially among the vulnerable groups of women and children. The displaced farmers have become liability to others, whom they have to beg food for themselves and their families and these also affect the education of their children. Some poorer households that make money by selling their labour to wealthier farmers are affected because agricultural production is hindered by conflict. In addition, these conflicts come with reprisal attacks by the host communities. Herds of cattle belonging to the herders are also killed which also worsen food insecurity (Guardian, 26th February, 2018). As conflicts and its effects on seasonal farming activities are continuing to disrupt food security, the prices of staple foods increase, further reducing food access to Nigerians.

Government Response and Intervention.

Since 1960's the region has been the subject of long-term climatological studies owing to decline of Lake Chad. The disappearance of Lake Chad has been a disaster for Nigeria and Sahel region. As the Lake has disappeared, especially the area bordering Borno State of Nigeria, it has taken economic opportunities for the 10.7 million people who rely on it to provide water for their crops and livestock (UNDP, 2018). Attempts at solving the problem have not been backed with adequate financial resources. As a result, Lake Chad Basin Commission was established in 1964 partly to manage the water resources of the basin. However, an audit of the LCBC found that it does not fulfill its purpose with regards to management and protection of basin water resources or reversal of the decline. As the effects worsen, in 1982, an Italian construction company Bonifica Spa, proposed an ambitious plan to reverse the shrinking of Lake Chad by constructing 2,500 kilometers navigable canal to transfer 100 billion cubic meters of water from Ubangi River in the Congo Basin to Lake Chad at the reported cost of \$23billion. But according to Marcello Vichi, the project engineer, as laudable as the project appear, years after the report was submitted, the response was deafening silence (Bros, 2018). Continuing, he said that the response of some of residents to filling up of Lake Chad was that "it is a ridiculous plan and it will never happen". They sceptics position was premised on the fact that Nigerian successive governments have failed to provide electricity, wondering if the political leadership has the political will and capacity to accomplish the humongous project with such budgetary value.

Since the proposal to reverse the decline of Lake Chad was announced, insignificant progress had been recorded. The implication is trying to fill up the lake and restore it to its former ocean- like glory by channeling water from Congo River system 2,500 kilometers (1,500 miles) away is not feasible in the nearest future. The sum of \$5million was donated by Olusegun Obasanjo administration in 2004 for a feasibility study that took eight years to achieve, has been the highest amount so far invested into the project (Obaji, 2018). As actions have consequences, so do inaction. The government's poor response to the disappearance of Lake Chad is responsible for the recent escalation of violent clashes between the nomadic



herdsmen and the farmers in the North-central and Southern States, because the herders have to move further south wards in search of water and pastures. The failure to build a canal or implement another workable solution is contributing to loss of lives today, thereby engendering food insecurity (Olatunde. 2018, Owonikoko, 2018).

Running along the borders of four countries and through varying cultures and ethnic loyalties, the trans- boundary nature of Lake Chad makes the reversal of its natural resources appear intractable and complex. To this end, diminishing resources of the lake water basin needs the committed co-operation of the stakeholders devoid of politics of foreign partners, and Nigeria is expected to take the lead as the economic power-house of Western African subregion. According to World Bank Manager for Water Resources, Jonathan Kamkwalala (2014), "we also know that the issues surrounding co-operative water management are complex, and this holds true for Lake Chad where the issues are challenging at the sectorial, national and regional levels". To him, in resolving the disappearing of the water resources, all critical stakeholders of LCBC should be committed to the project of channeling water from Congo Basin or other sustainable plan. In his address to United Nations Security Council, the Nigerian Water Resources Minister said that the project to save the lake from extinction is important to Nigeria, but that it would take a very long period of years to accomplish. The study and design alone could take up to 5-10 years, while actual construction would take a longer period of time through meticulous, thorough plan and implementation (Adamu, 2018). Following from the above analysis, the recharging of Lake Chad appears to be a mirage at the moment. Laudable as the project is, trying to fill up the lake and restore it to its former glory through inter-basin water transfer is a near impossibility without the commitment of the LCBC countries and wideranging support from the international community. This scenario has grave implication for the lingering farmers-herders clashes and also for food security within the Lake Chad region.

Conclusion

The shrinking of Lake Chad which provides food for millions of people in Nigeria and the disappearing natural resources has become a threat to biodiversity and require urgent attention. The lake is fast losing its traction, as the water level and size has shrunk by massive 90 percent compared with what it was in the 1960's. The shrinking of the water surface engenders as well as escalates herders-farmers conflict, and reinforces food insecurity and other criminal activities like cattle rustling and kidnapping. Though water may be scarce, but capacities to mitigate environmental constraints are not. Providing sustainable solutions to these challenges require sustainable engagement which will strategically address the interrelated issues of environment and human security. While the social dimensions of challenges may require longer term measures because of ethnic and religious coloration, in the short term the most pressing concern is to save lives through food security, and the most effective means for achieving this goal is to recharge Lake Chad. Given the enormous cost this entails and the obvious limitations in the capacity of the LCBC countries to muster such resources, this option appears a forlorn hope. However, with proper commitment by the leaders of these countries and appropriate support from the international community, the necessary first steps could be taken towards confronting this daunting challenge. And since climatic



variations and its attendant environmental consequences have become part of our everyday existence, the option of not taking any action by all concerned is really not an option at all.

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