



Resource Conflict and Environmental Challenges in the Lake Chad Basin: An Analysis of the Sedentary Farmers and Nomadic Pastoralists Conflict in Nigeria

By

Salisu Inusa Hassan

Department of Political Science, Federal University of Kashere

P.M.B 0182, Gombe State

+234 7035536067, salisfuk@gmail.com,

Ahmed Usman

Department of Political Science, Federal University of Kashere

P.M.B 0182, Gombe State

+2348036359285, Uthmaan01@yahoo.com, usmanloko02@gmail.com

&

Usman Gayam Usman

Department of Political Science, Nasarawa State University, Keffi

+2348033131624, gayamusman@gmail.com

Abstract

Scarcity of resources is one major source of competition between and among different groups in all existing human society. The sedentary farmers and nomadic pastoralists are two major groups situated in the Lake Chad Basin who are consistently competing over land and water resources for survival. Thus, the consistent shrinking of the Lake over the years made fierce struggles by the two groups over access and use of resources inevitable. The Basin serves as source of livelihood to the pastoralists and farmers who cultivate the land as well as fishermen who are also dependent on the available surface water. The Lake Chad environmental impact has been viewed from various perspectives depending on the context and dynamics thereupon. These therefore relate to socio-economic and political context, peace and security, climate change among other variables. Nigeria, Niger, Chad and Cameroun are the riparian states to the Lake Chad basin. This paper examined the effects of environmental challenges in the Lake Chad basin as it became a potential source of conflict between Farmers and pastoralists. The paper utilized Neo-Malthusian Environmental Scarcity Theory proposed and developed by Homer-Dixon, also, the paper adopts qualitative research method with data sourced from array of secondary sources which were qualitatively analyzed. The findings revealed among others that resource-based conflict is likely to continue unabated and part of the practical solution to it, is the attempt to recharge the Lake by the countries involved Nigeria inclusive.

Key Words: Environmental Challenges, Farmers, Herders, Resources, Competition

Introduction

Scarcity of natural resources and competition over land and water in the Lake Chad basin is a major concern that cannot be swept under the carpet. This is because the demand overstretched the supply as the area is a home to over 47 million people put together within the riparian states. In natural resource-dependent economies such as those in Africa, land, forests and



water are the primary environmental goods and sources of livelihoods (Ejigu, 2006). Hence, the inhabitants largely depend on the biodiversity of the basin for fishing, livestock farming and indeed other agricultural practices (LCBC, 2016). The Lake is situated within the fringes of four sovereign nations of Nigeria, Niger, Chad and the Cameroun, all together farmers and herders in the banks of the Lake and its Islands according to a report in 2014 were approximated to be two million people aside the 13 million who are highly dependent in terms of cultivable land for food and water uses (Wetering, 2018).

However, the humanitarian crisis in the basin has a capacity of being one of the world largest and most complex humanitarian disasters within the context of potential and actual conflict by competing groups for socio-economic survival. The utility of the basin has been consistently declined, on one hand due to global warming and climate change which impacted on its shrinking water volume. While on the other hand, the raging insecurity manifested by Boko Haram insurgency further fueled the atmosphere of uncertainty of security concern. Amidst this dilemma, the farmers and herders compete vigorously for scarce available resources of the land and water for survival.

Indeed, there exist a nexus between environmentally induced conflict between and amongst farmers who utilize the land for both rain fed and irrigation farming, fishing activities as well as the herders or pastoralists who roam about searching for grazing land and water for their animals. The intervening factors occasioned by the overuse of water and land, changing access and availability of resources, population growth, global warming and climate change as depicted in the report of Adelphiin 2016 were all put together accounted for the intensity of competition amongst groups for livelihood in the Lake Chad basin. It should be noted that the ratio of utilization of the lake resources has over the decades been nose diving. Thus, 56 years ago in 1963 the population according to UN population fund was around 60 million and the capacity of the lake for sustenance was appreciable. While by 2017 the population has spontaneously increased to about 243 million and at the same time the capacity of the lake has significantly decreased to about 10% in its volume (UNFPA, 2017).

Theoretical Framework

The paper adopts Environmental Scarcity theory as a framework of analysis. The theory was proposed and developed by Homer-Dixon in 1994 in a bid to link environmental scarcity and violent conflicts. The theory was a product of empirical researches conducted in some countries of Latin America, Africa and Asia. Hence, the main postulation of the theory is that scarcity of renewable resources arising from three major sources indeed causes or aggravates conflicts. Fundamentally, Homer-Dixon (1994) pointed out that decreased supply of the resources due to depletion and degradation, increased demand due to population growth or increased per capita resource consumption and unequal resource distribution were the primary sources of scarcity of renewable resources.

The reduction in the quantity and quality of resources shrinks the resource pie if combined with population growth as well as unequal distribution of resources the result is therefore, environmental or resource scarcity which ultimately leads to violent conflicts among



the user groups. The Lake Chad basin has been a source of livelihood to many groups such as sedentary farmers, pastoralists and fishermen for so many years not until decades back when the whole area was confronted by serious degradation and depletion as a result of climate change and global warming. The lake could no longer provide the much-needed resources to the inhabitant groups as a result of scarcity hence a very serious contestation over the limited resources and southward movements of large segments of the groups for greener pasture. The consequence of this effect is the perennial conflict between the farmers and the pastoralists in the Lake Chad basin areas and other places in Nigeria.

The Nexus between Environmental Challenge and Resource Competition

The environment is everything that creates natural conditions of the existence of organisms including man and animals and a precondition for further development in the context of biodiversity. The nexus between environment and conflict the world over, posed a great threat to peace and security be it resource competition as in the case of Lake Chad or due to agitation against environmental degradation as in the case of the oil rich Niger Delta in southern part of Nigeria. But in specific context of the natural resource competition between groups in the Lake Chad, global warming and climate change which converges and interact with other environmental, economic, social and political shocks and pressures, ultimately resulted in instability and conflict (Chitra, et'al 2018).

As the challenge of the Lake Chad consistent receding from its original volume becomes obvious, linked to global warming and climate change, scholars have traced its origin to European industrial revolution. As succinctly argued by Bakut(2005) that; industrial revolution brought with it not just progress in science, technology, medicine and modernity by extension its impact introduced the degradation of the environment and its associated dangers to humanity (Bakut, 2005). Furtherance to this, the impact of global warming is attributed to pollution whose causative factors are industrialization and development. The correlation between global warming and industrial pollution is manifested in the rising sea level resulting to excessive flooding. By extension global warming led to hotter climate, particularly in Africa, it contributed to drought which in turn exacerbated desertification and erosion and invariably results to displacement, loss of farmlands and livestock, competition over available scarce land and water resources for both grazing and farming becomes intensified (Bakut, 2005). Consequently, the demography and the resultant environmental challenges in the Lake Chad Basin, has great bearing with conflicts between the farmers, the herders and indeed the fishermen who solely depend on the available land and water for survival.

An Overview of Environmental Challenges in the Lake Chad Basin

For the avoidance of potential conflict arising from the management of water and land resources of the Trans boundary wetland in the Lake Chad Basin, the Lake Chad Basin Commission (LCBC) was established in 1964 principally by Chad, Niger, Cameroun and Nigeria. Similarly, Central African Republic and Libya joined the commission in 1973 and 2009 respectively (Cheri and Kaku 2018). Indeed, the Lake is blessed with more than 600,000 hectares of wetland, thereby making it the highest producer of livestock, legumes and fresh water fish in the country (Vossolo in Cheri and Kaku 2018). Therefore, what happens over the decades in terms of reduced volume of water and the availability of forage and legumes for livestock and



irrigation is enough to trigger resource-based competition between and among farmers and herders in the region.

The Lake Chad basin was originally estimated to have covered an area of 427,000 Km² (Hall 2009, LCBC 2016). However, over the years, the water volume and indeed the trans-boundary wetland have been consistently shrinking. The major challenge of the basin as noted by Agamal (2011) is the potential threat it poses to water resources scarcity principally due to climate change, rapid population increase, and unsustainable way of utilizing the resources. As the crisis of climate change deepens, the competition over water and land in the Lake Chad basin couple with series of migration as a fall out of insurgency in the north east and desertification further exacerbate the farmers, fishermen as well as herders scampering for scarce available land, water and by extension the wetland areas that made up of the riparian countries. The obvious that is staggering as challenge is attested to in comparison of the basin water volume of about 37,000 Km² in 1963, a decade after in 1973, the lake was reduced to 25,000 Km². Furthermore, according to a report in 2017, the Lake Chad basin has significantly depleted to about 2000 Km² (LCBC 2017, Agamal 2011, Wetering 2018). This accounted for almost 90% loss of its original size thereby causes its near extinction. Hence, if nothing is done, the humanitarian crisis may lead to devastating consequences.

Water and land resources are two mutually essential socio-economic lifelines for human and animal sustenance. As such, the centrality of these resources in the Lake Chad basin for agricultural, fishing, sanitation, livestock rearing and industrial purposes has been acknowledged to be under threat, either due to overuse or the phenomenon of climate change. It is within this context that farmers as well as the herders compete for these scarce natural resources which ultimately breed acrimony, mistrust and ultimately conflict.

Similarly, prior to the intensified campaign of Boko Haram insurgency, the North East has one of the richest foraging stocks in the country (Mohammed, 2019). This implies that, the Lake Chad Basin attracted herders for grazing in the area, while at the same time farming in both rain fed and irrigation in addition to fishing activities. However, it was noted that, famous Sahelian drought experienced in the 1970s and the 1980s has adversely precipitated inter-group conflict and rising cases of farmers and herders unrest not only limited to the Basin but by extension to the West African Sub-Region (Mohammed, 2019). Thus, the only viable option and strategy for survival of the cattle's is the mass movement of the herders down central and southern part of Nigeria in search of foraging stock or grazing area thereby creating new dynamics of farmers and herders conflict.

This development dynamics culminated in the national discourse on grazing land, cattle colony and ranching as viable options. Though, the attempt by the federal government arouses certain politicization of the approach. While some federating units believed that the only way forward was to enact a law prohibiting open grazing. Be that as it may, the underlying problem in the Lake Chad had been the basis that precipitated the descending herders to migrate

southward in search of forage hence farmland encroachment and crops destructions along the route of migration.

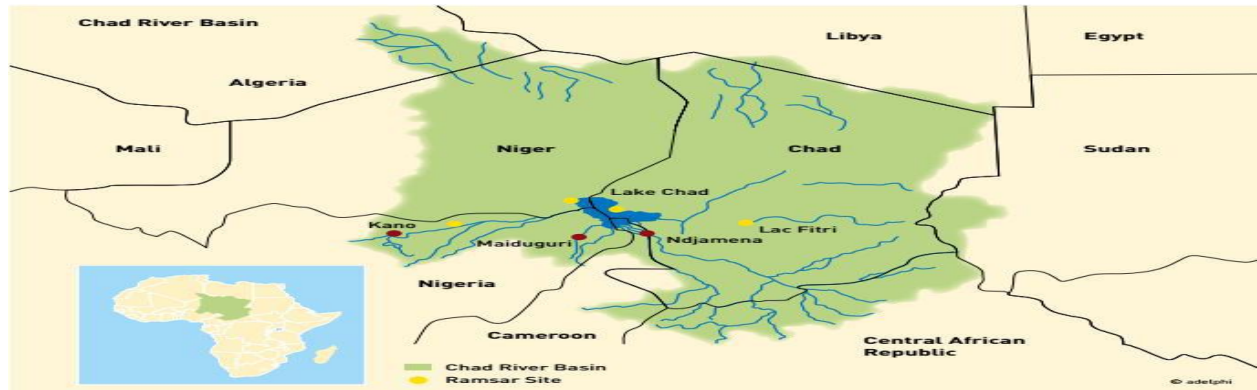
Perusing through the development of livestock production in Nigeria over the years, the Lake Chad Basin contributed significantly to the national gross. It is estimated that as at 1975, there were 9.3 million heads of cattle which has spontaneously increased to 19.5 million heads as at 2011 with a growth rate of 2.1% per annum. This quantum of population increase requires foraging for its survival, which by 2016 the number reached about 22 million and more are counting (Fabiya & Otunuga in Mohammed, 2019). The implication of this is that, while cattle population and the demand for land and water resources principally in the Lake Chad Basin have been spontaneous, the corresponding availability keeps on decreasing unabated. And this is the context of the potential conflict both covert and overt in nature.

The Farmers-Herders Resource Competition in the Context of the Environmental Impediments in the Lake Chad Basin

To begin with, *Figure 1* below is a pictorial map of the Chad Basin showing its sources of water across the stretch of eight countries radiating through the north, west and central Africa. The Basin is principally bordered by four sovereign states of Nigeria (7%), Niger (28%), Chad (45%) and Cameroun (2%). The basin in addition extend further within the purview of four more countries among which are Sudan (4%), Algeria (4%), Libya (0.5%), and Central African Republic (9%) respectively (Galeazzi et al., in Wetering 2018).

From a simple inference derivable on the above statistics of the Lake Chad coverage, it is clear to understand that Chad Republic constitute almost half (45%) of the Basin then followed by Niger with 28% area coverage. Thus, cumulatively Chad and Niger constitutes more than two-third of the total. While the six States including Nigeria constitutes the remaining 27% put together. What this implies is that, Nigeria which constitutes a smaller percentage of the Chad Basin, is more threatened by the shrinking of the area because the potential areas of expansion on account of the environmental impact and displacement due to desertification, drought, and the rising tide of insecurity in the hinterland of Nigeria has some form of interplay to the problem. The evidence of this impact is glaring with new dynamics and changing narratives of farmers and herders' exodus in states like Benue, Kogi, Ekiti, Kwara, Plateau, Imo, Anambra, Bayelsa, Oyo, Ogun, Nassarawa among others.

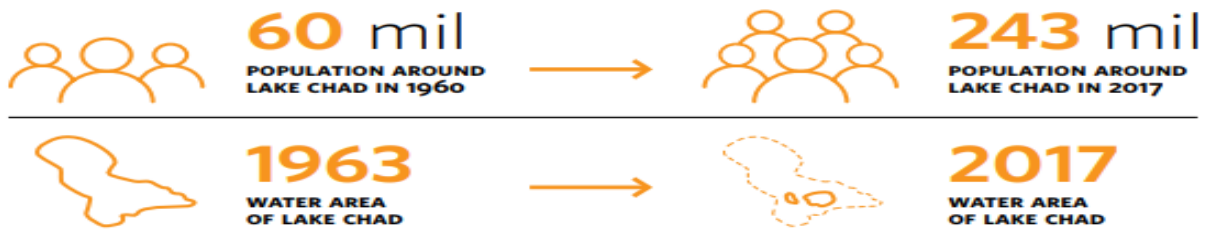
Figure 1



Source: Adapted from (Wetering, 2018 p.26).

However, in furtherance to the above in figure 1, the correlation in the resource utilization and the upsurge in population as observed in figure 2 below clearly indicated that, as spontaneous environmental conflict becomes inevitable over the scarce available resources in the Lake Chad Basin. This indeed has vindicated Homer-Dixon’s (1994) theory regarding a link between scarcity of renewable resources and conflicts adopted in this paper. The evidences as depicted from figure 2 below shows that, there were 60 million people around Lake Chad in 1960 and in over six decades later in 2017 there has been a steady quantum growth which quadrupled to 243 million (Wetering, 2018). The implication here is that, the capacity of the Basin to support the growing population is burdensome thereby opening up the vicious circle of competition particularly between the farmers and the herders which hitherto supported in abundance both groups with little or no acrimony.

Figure 2



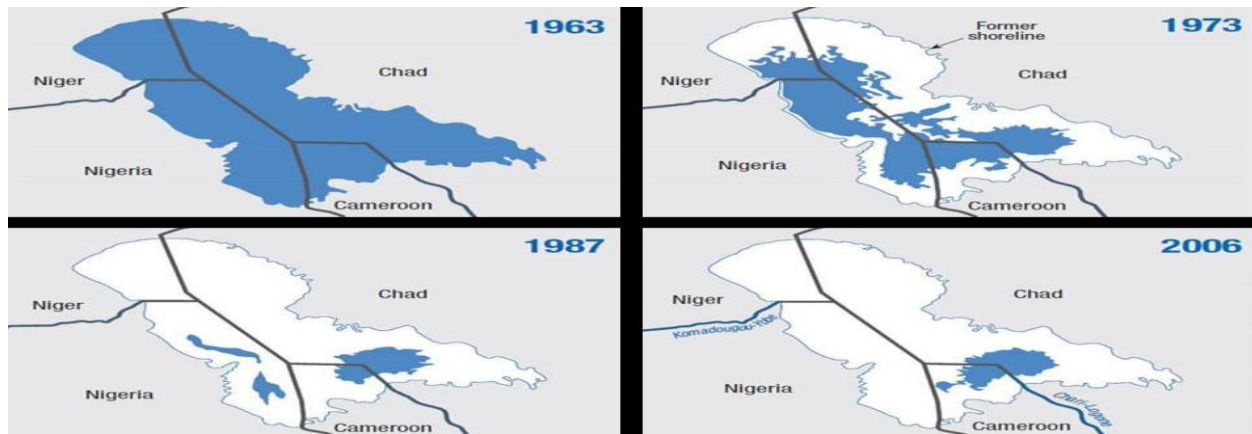
Source: Adapted from (Wetering, 2018 p.28)

As observed by Wetering (2018), the Lake has enormously diminished in size, and population dependent on its resources is geometrically increasing in opposite direction to resource availability. He further stated that, the shrinking of the Lake Chad has negatively affected the economic viability in terms of fishery, agriculture and livestock productivity in the region which manifested in mass migration and internal displacement. As argued by some scholars like Okpara (in Wetering, 2018) there is a nexus between the environment and conflict in the Lake Chad. In other words, within a decade between 2009 to 2019 the menace of Boko Haram insurgency could

be attributed to some extent with disappearing and receding of the Basin. This constitutes regional insecurity that has been a hydra headed and complex security challenge to the riparian states. In addition, it also revealed how the receding Lake resulted in economic decline, poverty, displacement and migration due to desertification which fuels tensions and conflict in the region. This trend fosters Boko Haram recruitment from the poverty striking population who are vulnerable and uneducated.

To further attest to what the preceding figure above revealed, figure 3 below presents a graphical evidence of the Lake Chad Basin desiccation and loss of potentials over the span of 46 years. Desiccation here implies the state of dryness or waterlessness which adversely affected socio-economic utilization of the population in the area. This development raises the bar of acute shortage of both surface and underground water resources for fishing, farming and grazing thereby threatening the lives of millions who heavily depended on the lake as means of survival.

Figure 3



Source: Adapted from (Wetering, 2018 p.27)

Meanwhile, as an instance to the effects of desiccation in the Lake Chad Basin, a study conducted by Cheri and Kaku (2018) on the “Komadugu Yobe river management in the face of humanitarian crisis” observed that farmers, fishermen and pastoralist were the most affected due to the significant reduction of the river flow affected by silting, aquatic weed infestation, flooding in addition to typha grass weed (Cheri and Kaku 2018). This ultimately halted the river’s flow that hitherto was unrestricted sources of water to the Lake Chad Basin. But the fundamental challenge of the Komadugu Yobe River and the Lake Chad itself as observed by Cheri and Kaku (2018) is the government decision to undertake construction of dams along the major sources of water at Kafin Zaki in Jigawa State. This implies that, the water is intercepted even before reaching Komadugu Yobe River and by extension the Lake Chad Basin.

Conclusion

In conclusion, based on the glaring empirical evidences of the environmental challenges and the impact of climate change in the Lake Chad basin, potential conflict between the farmers and the herders is almost at the brink of serious humanitarian crisis. Though the intervening variables of climate change and drought are natural, evidence has shown that human factors are also responsible such as overgrazing and mismanagement of the available land and water resources. Consequently, even with the establishment of the Lake Chad Basin Commission (LCBC) decades ago, the ultimate objectives left so much to be desired.

Recommendations

- a. Concerted effort need to be put in place by all authorities concerned within the context of humanitarian crisis staring the demography of the region.
- b. The need to recharge the Lake from river Congo under the auspices of inter basin water transfer is the most cogent approach, thus, it should be stepped up.
- c. The United Nations would play a critical role in making a special appeal along with the riparian states as a viable solution must be sorted with all urgency.
- d. Effort should be put forward by the Nigerian government towards the survival of the environment to further resolve the lingering insurgency in the region.
- e. Human, animals and the environmental survival of the Lake Chad is non-negotiable, hence the need for a pragmatic approach with all available resources at the disposal of the authorities concerned.

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Bio-data of the Authors

Salisu Inusa Hassanis a lecturer in the Department of Political Science, Federal University Kashere. His area of research interest includes Peace studies and conflict resolution and Nigerian government and politics.

Ahmed Usman is of the department of Political Science, Federal University Kashere. and currently a PhD candidate at Bayero University, Kano.

Usman Gayam Usman is a Lecturer in the Department of Political Science Nassarawa State University, Keffi. and currently a doctoral candidate Federal University, Lafia.