

# **Climate Change, Migration and Conflict: A Historical Survey of People of Northern Nigeria and their Neighbours from the period of the Mega Chad**

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## **Abstract**

Historically, climate change is often associated with movement/migration from one region to the other. This in turn has led to conflict over identity, space and economy between the migrant and the settlers. In some cases, the people are able to integrate with ease, while in some other cases; it has led to the complete overthrow of the existing structure (replacing it with a new one). This paper therefore seeks to examine the causes, courses and effects of climate change on what historian have referred to as Mega Chad and the people. . Data obtained from primary and secondary sources (literature review and content analysis) were deployed to carry out the study with an analytical and narrative historical method. Findings indicates that although migration in the area instigated by climate change which affected the size of the Mega Chad led to the formation of new settlements and kingdoms with well established structures, but the continuous shrinking of the Chad river fast becoming a threat to human existence around the area. This is because as it is today, the lives of over 15 million Nigerians as well as that of about 10 million others living outside Nigeria's shores of the lake are in jeopardy, especially as it affects their economic lives, this in turn has led to hostility in and around the area as well as the movement of some people around

to area in search of other forms of livelihood. This in most case have led to blood clash and conflict over limited economically viable land and other natural resources. Also at risk are about 10 million others living outside Nigeria's shores of the lake and this is worrisome.

*Keywords:* Climate Change, Migration, Conflict, Mega Chad, Northern Nigeria.

## **Introduction**

Climate change is a long-term shift in the statistics of the weather (including its averages). For example, it could show up as a change in climate normals (expected average values for temperature and precipitation) for a given place and time of year, from one decade to the next. Climate change is a normal part of the Earth's natural variability, which is related to interactions among the atmosphere, ocean, and land, as well as changes in the amount of solar radiation reaching the earth. The geologic record includes significant evidence for large-scale climate changes in Earth's past. According to the National Climate Data Centre, 2011, the case of the Antarctic Ice core which has been on since the last 420,000 years, is a good example. (<http://www.ncdc.noaa.gov/oa/climate/globalwarming.html>)

The focus of this paper will be limited to the area roughly divided between the Republic of Nigeria, Chad and Niger and environs. Geographically, it has been described as the area circumscribed by a line running from the mountains of Tibesti in the northeast, southwards (through the Jurab depression) to lake Fitri in Kanem, and thence slightly south of west (across the middle course of the Shari –Logone river system and the great bend of the Gongola) to the northern foothills of the Central Nigerian highlands; from there north and north east across the valley of the Gulbin Kebbi to the southern end of the Azben plateau;

returning to Tibesti via the great erg of the Tenere.

## **Definition of Scope (Space)**

The “Lake Chad” is one of the world’s largest and most historical Lake located in the Sahel region of Africa (lat. 12:30 N to 14:30 N and long. 13:00E to 15:30 E ) which is one of the most vulnerable regions to climate change bordering North-Eastern Nigeria, North-Western Cameroon, South-Eastern Niger and South Western Chad republics. The lake was 25,000 km square in the 1940s as indicated by the historians and some geo- archaeological and historical

evidences, the recent of which was the accidental discovery of an ancient Canoe dating back to over three thousand years (3000) located in about Six hundred kilometers (600) away from the present day bank of the Lake in the Nigerian Territory, in the year 1992 by a peasant farmer from the Kanuri inhabited desert areas of Damaturu-Nigeria, while digging a well in quest of water for his domestic activities as reported by Abubakar, B. (IJNA 37.2,2008), but due to the continues incessant impacts of climate change in Africa which resulted in the incessant drying of rivers especially those feeder rivers supplying over 90 % of the Lake water like the River Shari in the republic of Cameroon and the river Yobe in Nigeria has resulted those community living along the courses or banks of the feeder rivers to be blocking the rivers from supplying the water in to the Lake while trying to adapt to this climate change situation by building Dams along these feeder rivers in quest of water for their irrigational activities as well as other activities like the generation of Hydro electric city and other relevant activities. This situation has resulted in the reduction of the water of the Lake to just 1800 km square and presently the Lake is at lat. 12:50 N to 13:00 N and long. 14:50 to 15:00 E. Hence this situation has already started causing problems to the

indigenous communities living around and depending on the Lake for their survival, because there is increasing drop in fishing activities in the lake as well as reduction in water supply for pastoral and irrigation farming activities in addition to other secondary impacts like the increasing rate of rural urban migration, job loses and desert encroachments due to the growing numbers of people running into the fire wood selling businesses which depends on the deforestation of the shrubs and the little scattered trees serving as a shelter belt between the Sahara desert located in the north of the Sahel region and the fertile Lands (Babagana, A. 2007, Abubakar B, 2008).

In line with the above, it is clear that Climate change has wide-ranging and potentially serious health consequences, either due to direct-acting effects (e.g., heat wave-related deaths, weather disasters) or disturbances of complex ecological processes (e.g. changes in patterns of infectious diseases, in fresh water supplies, and in food production). The United Nations Intergovernmental Panel on Climate Change (IPCC) in its fourth assessment report have submitted that globally, “the health status of millions of people is projected to be affected through, for example, increases in malnutrition; increased deaths, diseases and injury; increased burden of diarrheal diseases; increased frequency of cardio-respiratory diseases due to higher concentrations of ground-level ozone in urban areas related to climate change; and the altered spatial distribution of some infectious diseases”. The relationship between climate change, its drivers, effects on systems and socioeconomic development, health, mitigation and adaptation (Onwuliri, C.E.O (2011)

According to Onwuliri, C (2011), The environment is central to our continued existence on earth and changes in the environment (both natural and man-made) affect it either to the benefit or detriment of man. One of such changes in the physical environment which has grave consequences for the existence of mankind is climate change. Interestingly, climate change is no longer a speculative issue. The scholar

further posited thus

A strong, global scientific consensus exists to show that this phenomenon is real and if current trends of global warming continue, rising temperatures and sea levels and more frequently extreme weather events (heat-waves, storms, floods, droughts, cyclones, etc) could lead to severe shortages of food and water, loss of shelter and livelihoods, and extinction of plant and animal species (Climate Change Synthesis Report, 2007). We have in the not too recent past witnessed devastating weather related events in different parts of the world including hurricanes (e.g. Katrina and Rita in the USA), tsunamis, typhoons, flooding especially in the Asian continent, wild fires especially in Australia, USA etc. Currently, the ongoing flood incident in Pakistan that has so far claimed about 1,600 lives and rendered another four million people homeless is a sad reminder of the ugly and devastating consequences of global warming on the environment. There is no gainsaying the fact that humankind is paying dearly for the massive alterations in the environment that have induced climate change. This is because of the frequent incidence of climate change related disasters in the world today. There is hardly any month that passes without an incident occurring in one part of the globe or another since the advent of the 21st century.

Environmental conditions (which can not be totally divorced from climate change) are likely to have an effect on people's sense of life satisfaction. They can have direct effects through impacts on the aesthetics, visibility, etc. of the local environment, and indirect effects through impacts on people's health, affecting their ability to enjoy other aspects of their welfare. Even if the impacts are not always tangible or apparent to those affected, a general level of concern about

environmental conditions may affect people's sense of life satisfaction (Jérôme Silva et al)

In a related manner, IPCC (2007) defines climate change as a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and /or the variability of its properties, and that persists for an extended period typically decades or longer. Although the length of time it takes the changes to manifest matters, the level of deviation from the normal and its impacts on the ecology are most paramount. This prompted Ayoade (2003) to state that secular variations in climate occurring over a period of 100 to 150 years may not qualify as a climate change if conditions will quickly reverse later, but a change in climate usually takes place over a long period of time of at least 150 years with clear and permanent impacts on the ecosystem. Climate change is different from the generally known terms like climatic fluctuations or climatic variability. These terms denote inherent dynamic nature of climate on various temporal scales. Such temporal scale variations could be monthly, seasonal, annual, decadal, periodic, quasi-periodic or non-periodic.

Available evidences as revealed from the works of earlier scholars (some of these includes Odjugo 2001a; 2005; Odjugo and Ikhuoria 2003; NEST 2003; Chindu and Nyelong 2005; Mshelia 2005; Odjugo 2001a, 2005, Nwafor 2007; Jagtap 2007, Ayuba et al. 2007) indicates that although climate change and its impacts, is a global phenomena, however, the biting effects is felt more by the developing countries, especially those in Africa, due to their low level of coping capabilities Nigeria is one of such developing countries. It is therefore not surprising that Nigeria (historically since about 7000 BP) has been plagued with diverse ecological problems, which have been directly linked to the on-going climate change (observes erratic pattern of weather elements in Nigeria).

## **Climate Change and Migration and the Development of City Centres: Historical Review**

Available evidence indicates that the impact of climate change in Nigeria with particular reference to the northern part of the country has been no from historic time (Smith A, 1971, 1976, Kwanashie G, 1987). Archaeological evidence from over 1500 archaeological sites recorded in the Chad-North Cameroun area made it clear that climate change has since started impacting on desertification and impacting negatively on plant species composition in Northeastern Nigeria. These may not be the only impacts of climate change in Nigeria. It is on this premise that this study took an overview of the impacts of climate change in Nigeria with the aim of compiling and synthesizing them holistically (Connah G, 1983).

Available archaeological facts and historical documents have argued that the area under study, during the last 20,000 years or so, though free from tectonic movements, has been subject to sensational climate changes, which in turn have radically modified the conditions of both the human, flora and fauna configuration of the region. Historians have gone on to posit that (with specific reference to the eastern zone), prior to the beginning of the climate change, a large percentage of the area was almost entirely occupied by a large lake, the Mega Chad. The size of this great sheet of water is argued to have been the size of the Caspian sea, stretching as far south west as modern Bama and Gashua (Nigeria) and in the north east to the foothills of the Tibesti. The shore land of this Mega Chad especially the northern part provided a suitable habitat for the hunters and food gatherers of Old Stone Age hillmen of Central Nigeria, a condition which persisted which continued until about 5,000 years ago (Connah G, 1983, Usman, Y.B, 1983).

Then after about 7,000 B.P., dramatic changes in climate appear to have begun in this region: changes which brought about not only a

substantial alteration in the distribution of surface water, but also a series of revolutionary modification in the fauna and flora and consequently the conditions of human life. This process has continued down to recent time and has led to what scholars have described as Climigration (Climigration has been coined as a word to describe this type of displacement. Climigration occurs when a community is no longer Sustainable exclusively because of climate-related events and permanent relocation is required to protect people. The Critical elements are that climatic events are on-going and repeatedly impact public. Infrastructure and threaten people's safety so that loss of life is possible. The process of desiccation and Climigration cannot be described in detail, during which many fluctuations of climate may have taken place (Ediang , A et al)

Describing the process of Climigration, historical accounts as documented by Abdullahi S,(1987), posited about 700 CE the Kanem Empire began to form in what is now Chad and Libya. The nomadic Zaghawa, a Tebu-speaking tribe, were forced southwest to the area around Lake Chad by political pressure and by the desiccation of their grazing lands. As nomads they herded cattle, camels, and sheep. They also harvested wild grains. The area around Lake Chad was controlled by a number of independent walled city-states belonging to the Sao culture. The Zaghawa eventually dominated the Sao, but during this process they adopted many Sao customs. The Sao were a civilization that began to flourish about the 6th century. The center of Sao civilization was on the Chari River south of Lake Chad. There is some indication that they may have originated in the Nile Valley. According to one hypothesis, they were the descendents of the Hyksos who had conquered the Kingdom of Egypt and who were later driven out. War between the Sao and the Zaghawa continued from 700 through the 15th century.

The positions of Smith A, (1971 and 1976) have been corroborated with the earlier works of Arab geographer al-Ya'qubi, who as early as 890, argued that due to Climate change leading to the shrinking of the

Mega Chad, the Zaghawa area (somewhere around the present day Northeastern Nigeria) witnessed heavy traffic of human and goods, criss-crossing the area. Thus he described the Zaghawa as one of the cities that emerged and the people as living in a placed called Kanem. He then listed a number of other kingdoms over which they had control. The account continued thus

By this time they had apparently achieved some sort of hegemony over the smaller complex societies that stretched from Lake Chad to the Nile River Valley. (According to al-Ya'qubi)... they were also involved in the slave trade and were selling slaves to the north. The conquest of Kanem by the Zaghawa was done under the Duguwa dynasty which was started by King Sef about 700. The dynasty is named for King Dugu, one of Sef's sons, who was ruling about 785. Abandoning their nomadic lifestyle, the Zaghawa under King Sef (also called Saif) established a capital at N'jimi (the word for "south"). Under the rule of Dugu, Kanem expanded to become an empire. The Zaghawa kings, called mai, were regarded as divine and belonged to a ruling establishment known as the Magumi.

Kanem held a strategic geographic location at the southern end of the trans-Saharan route between Tripoli and Lake Chad. This trade route, which originated in prehistoric times and was flourishing in the 8th century, linked the Mediterranean countries to the resources of Sub-Saharan Africa. Trade goods included ivory and slaves. The North African traders, primarily Berbers and Arabs, not only brought trade goods, but also a new religion: Islam. In 1085, Hummay, a Muslim noble, removed King Selma, the last Duguwa king, from power and established the Sefuwa (also called Sayfawa) dynasty. The Sefuwa dynasty brought great changes to the Kanem Empire. First, the court and state policies were Islamized. The conversion to Islam created some dissention and

some of the Zaghawa broke from the empire and migrated east. Second, with the conversion to Islam the history of Kanem also had to be revised. Thus, the founder of Kanem, King (Mai) Sef was associated with Sayf ibn Dhi Yazan, the legendary Yemenite hero. Sayf ibn Dhi Yazan (516-574) was known for ending the Axumite rule over Southern Arabia. With Islam, Kanem was able to take advantage of new ideas from Arabia and from the Mediterranean area. Islam brought literacy, at least with regard to political administration. Under the Sefuwa dynasty, Kanem's kings travelled frequently throughout the kingdom. The herders and farmers acknowledged their allegiance to the kingdom by paying tribute.

As the Seifawa Dynasty formed their Kingdom and movement continued in the area, some earlier occupants of what is today known as Kasa Hausa (Hausa Land ) were forced to move further southwards. According to available historical documents, some Niger Congo language speaking people immediately south of the frontier, such as the Gwari people continued to migrate from the north towards the south; this movement also took a large chunk of the migrants to the central Nigeria highlands which stand astride the frontier, became a place of refuge most of the people of the Niger Congo language groups previously spread over a much wider area. In his analysis, Greenberg (1955 cited in Smith (1987) puts it thus;

The southern frontiers of the region here is a linguistic frontier (as it is ease of the Chad), marking the dividing line between Chadic speech and the quite different Niger Congo speech to the south. This frontier ...have been established as a result of the southward displacement of the Niger Congo speaking peoples in face of an invasion of Chadic speaking groups from the north.

The import of the above is that this migration created two distinct scenario; in the situation there existed a sort of smooth relationship

between relationship between the new migrants and their Hausa host (this does not in any way point to the complete absence of conflict, as there were cases of warfare and hostility, but Islam as a religion became a unifying factor) and the fate of the people that were pushed further southwards into the central Nigeria area like the Gwari and others that may have followed them. For those that accepted the dominance of the Sayfawa groups, historians have argued that they were drawn into a network of diplomatic exchanges and relationships which were made with sultan in North Africa especially during the reign of Mai Dunama Dabbalemi (1221-1259). This existed in the form of a special hostel built by Mai Dunama Dabbalemi in Cairo to facilitate pilgrimages to Mecca. Mai Dunama Dabbalemi also declared a jihad against the surrounding tribes and expanded the empire into Fezzan region in present-day Libya, to Kano in present-day Nigeria. Mai Dunama Dabbalemi rewarded his military commanders by giving them authority over the people they had conquered. The military officers, however, passed their position on to their sons, thus transforming the system from one based on personal achievement and loyalty to the Mai, to one based on hereditary nobility. Following the death of Mai Dunama Dabbalemi, there was dissention among his sons and dynastic feuds degenerated into civil war. As a result the outlying peoples stopped paying tribute to the Kanem Empire. After the death of Dunama II, the devolution of Kanem increased and by the end of the 14th century, the civil war, the internal struggles, and external attacks had torn the empire apart.

Analysts are of the view that **Sayfawa dynasty** or more properly **Sefuwa dynasty** is the name of the kings (or *mai*, as they called themselves) of the Kanem-Bornu Empire, centered first in Kanem in western Chad, and then, after 1380, in Borno. Theories on the origins of this dynasty vary. Many scholars assert that it may have been rooted in a Tubu expansion or comprised an indigenous dynasty. Other theories have also been made. The German historian Dierk Lange has argued that the

advent of the Sayfawa dynasty came in the 11th century, when Hummay consolidated Islam in Kanem. Lange adds that Hummay's advent represented the ascent of a Berber dynasty over the previous Duguwa Zaghawa one (Lange, 1977).

**Table** of Sefuwa-Duguwa kings in Kanem (Urvoy, 1941, Lange, 2004)

<b>Name of the king</b>	<b>Earlier dating</b>	<b>Historical name and dating</b>	<b>Historical identity</b>
(1) Sef	c. 700	<u>Sargon of Akkad</u> (2334-2279)	Founder of the <u>Akkadian Empire</u>
(2) <u>Ibrahim</u>	c. 740	<u>Abraham</u>	Legendary Israelite patriarch
(3) <u>Dugu</u>	c. 785	<u>Hammurabi</u> (1792-1750)	Founder of the <u>Amorite Empire</u>
(4) <u>Fune</u>	c. 835	<u>Pûl/Tiglath-pileser III</u> (744-727)	Founder of <u>Neo-Assyrian Empire</u>
(5) <u>Arsu</u>	c. 893	Rusâ/Ursâ I (730-713)	6th <u>Urartian</u> king
(6) <u>Katur</u>	c. 942	Kuter-Nahhunte (1730-1700)	22nd <u>Elamite</u> king
(7) Buyuma	c. 961	Bunuma-Addu (c. 1770)	1st king of Nihrija/ <u>Nairi</u>
(8) <u>Bulu</u>	c. 1019	<u>Nabopolassar</u> (626-605)	1st <u>Neo-Babylonian</u> king
(9) Arku	c. 1035	<u>Assur-uballit II</u> (612-609)	Last king of Assyria
(10) <u>Shu</u>	c. 1077	<u>Sammuramat</u> (810-807)	Regent during the infancy of <u>Adad-nirari III</u> (810-783)
Unknown	?	?	
Kak.r.ah	.	.	Local king c. 870 CE
Unknown	?	?	
(11) Abd al-Jalil/Selma	c. <u>1081</u>	First Duguwa king (1064-1068)	First Muslim ruler of Kanem

## Sayfawa-Humewa kings in Kanem (Lange, 1977)

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Hume or Hummay	1068–1080
Dunama I ibn Hummay	1080–1133
Bir I or Biri I	1133–1160
Abdallah I or Bikorom or Dala I	1160–1176
Salmama I or Abd al-Jalil	1176–1203
Dunama II Dabbalemi	1203–1242
Kaday I	1242–1270
Biri I or Kashim Biri	1270–1290
Ibrahim I	1290–1310
Abdallah II	1310–1328
Salmama II	1328–1332
Kuri Ghana	1332–1333
Kuri Kura	1334–1335
Muhammad I	1334–1335
Idris I Nigalemi	1335–1359
Dawud Nigalemi	1359–1369
Uthman I	1369–1373
Uthman II	1373–1375
Abu Bakr Liyatu	1375–1376
Umar I or Umar ibn Idris	1376–1381

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## Sayfawa kings in Bornu (Lange, 1977)

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Said	1381–1382
Kaday II	1382–1383
Bir III	1383–1415
Uthman III Kaliwama	1415–1415
Dunama III	1415–1417
Abdallah III Dakumuni	1417–1425
Ibrahim II	1425–1433
Kaday III	1433–1434
Ahmad Dunama IV	1434–1438
Muhammad II	1438
Amr	1438–1439

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Muhammad III	1439
Ghazi or Ghaji	1439-1444
Uthman IV	1444-1449
Umar II	1449-1450
Muhammad IV	1450-1455
<u>Ali Gazi</u> or Ali Ghajideni	1455-1487
Idris Katarkamabi	1487-1509
Muhammad V Aminami	1509-1538
Ali II of Bornu	1538-1539
Dunama V Ngumarsmma	1539-1557
Dala or Abd Allah	1557-1564
Aissa Kili	(legendary)
Idris III Alauma or <u>Idris Aloom</u>	1564-1596 <sup>[10]</sup>
Muhammed VI Bukalmarami	1596-1612
Ibrahim III of Bornu	1612-1619
Umar  (Hadj)	1619-1639
Ali II	1639-1677
Idris IV of Bornu	1677-1696
Dunama VII	1696-1715
Hamdan (Hadj)	1715-1729
Muhammad VII of Bornu	1729-1744
Dunama VIII Gana	1744-1447
Ali III	1747-1792
<u>Ahmad</u>	1792-1808
<u>Dunama IX Lefiami</u>	1808-1816
Muhammad VIII	1816-1820
<u>Ibrahim IV of Bornu</u>	1820-1846
Ali V Dalatumi	1846

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A critical analysis of the list supports the view that with the shrinking of the Mega Chad the crisscrossing of the area led to some changes, in other cases assimilation and marriages, which has resulted presently in the admixture of peoples, tribes and religion in the Northeastern part of Nigeria, an impact which has spread to the entire northern Nigeria as witnessed today. This proves to be an indicator, that although the list

may not been perfect, but the people seems to agree on certain part of their history, historical fact and processes.

The above is attested to by the Encyclopedia of African History and Shillington K (Borno (Bornu), Sultanate of: Saifawa Dynasty: Horses, Slaves, and Warfare), which puts it clearly thus

Idris Alauma descended from the Saifawa Dynasty. The Saifawa's Saif bin Dhi Yazan of Himar (claiming descent from Yemenite cultural hero Saif bin Dhi Yazan of Himar) came to the area Kenam (northeast of Lake Chad) and consolidated power between the tenth and eleventh century. After that, his influence expanded north to Traghan in the Fezzan area (present-day Libya) in the thirteenth century. In due course, his influence waned so that he abandoned Kanem and headed for Borno (southwest of Lake Chad) in the fourteenth century and took over Gazargamo as his capital.

From that period down to the present day Nigeria, the area has remained a bee hive of activities especially as it relates to movement of economic goods and services which has continually benefitted the people of both countries. For example, Ayandele (1979) opined that few people realize that in the 18th Century the natron used by the Efik came largely from the Chad Basin; that the Yoruba obtained their horses from Tripoli through Kanuri middlemen long before the 19th century; that, as slaves, a large number of Hausa were an economic asset to the Yoruba. In line with Ayandele's view, Gavin, R and Oyemakinde W, (1989) wrote, that Nigeria acquire rare commodity such as natron or potash cut in slab on the northern edge of Lake Chad. The scholars posited that strings of natron bearing donkeys from the Lake Chad area dotted all the major routes in the north especially from Kano southward to the Niger at Bussa where it met another major rote from Brno along the Benue and thence to Yoruba land or west to Gonja in Ghana. In a more detailed and analytical

manner, Watts (1983 cited in Mohammed-Baba, T.A, 1989), graphically described the relationship thus;

The northern savanna and the Sahelian biome constituted a human ecological unity in which the affairs of Hausa agriculturalists and semi sedentary Fulani pastoralists were closely integrated with pastoral Wodaabe, Tuareg and other nomadic groups to the north. These apert linkages were embodied in the strong currents of exchange bridging the two regions – the desert culture providing salt, iron, date and livestock’ and the savanna providing the cloth, foodstuff and crafts products which conferred a measure of security in the face of climate variation.

The import of the above is that there has been a sort of symbiotic relationship and exchange of goods, services and ideas over time across the region, a mark of traditional diplomatic relations and good neighbourliness.

## **From Migration and Integration to Violent Conflict**

While scholars agree that the migration since the beginning of the shrinking of Mega Chad, have brought integration in some quarters as in the case of the establishment of the Kanem Borno Empire and the spread of Islam into most parts of northern Nigeria from about the 9<sup>th</sup> C.A.D, they also agree that it has led to cases of violent conflict which is still evident in some parts of the country today. For example both Fartuwa (cited in Hodgkins, 1960) and Lange (1987), argued that most of the expeditions of Idris, a descendant of Saif Ibn Di Yazan were violent and were carried out against the Tuaregs and the Margi. The expedition against the Margi started because at a certain point the ruler of the Margi

named Adwa refused to join Idris Alauma on expeditions as he usually had done. Adwa who held the position of chief Umara under Idris Alauma during the previous campaigns rebelled and totally abstained. This action on the part of Adwa angered Idris Alauma and this led to the beginning of a crack in the relationship between Idris and Adwa.

The above situation was not limited to the Borno area alone , but also the central Nigeria highland and the plateau which had housed most of the refugees who moved away at the onset of the shrinking of the mega Chad, and who have had to grapple with the problem of land and other natural resources to support life. This becomes even more realistic when considered in the light of the fact that of recent the area has suffered from severe environmental drought and hardship. The rapidity this phenomenon is taking place is attributed to reduced rainfall [as result of the recent climatic change], and droughts. From the historical record there are records of droughts from 1680 – 90, 1730 – 60 and 1820 – 40 in addition to the recent drought during the 1970s] as well as abstractions from influent rivers, excessive evaporation (2000 to 3000mm/year), and greatly increased amount of irrigation water being drawn from the lake. Since the lake levels are important for regional hydrological investigations. Lake Chad is very shallow with an average depth of 11 meters and maximum water level of about 283 meters above sea level. The immediate impact is that agricultural yields ranged 12 and 40% of the annual average during the drought. In a similar manner it is estimated that about 300,00 animals, representing about 13% of the total livestock population of the Northern Eastern State [Now Adamawa, Bauchi, Borno, Taraba and Yobe states] perished during the 1973 drought. The drastic reduction in water volume at both Kanji Lake and Lake Chad during the same drought resulted in only about 10,000 tons of fish caught in 1973 as compared to an average annual of 28,000 tons. Similarly, during the 1972-73 drought for example 75,000 inhabitants of Mali and Niger bought refuge in both Nigeria and the Algerian Sahara. In the 1984 – 85

drought as many as 40,000 also left their houses. During the latest drought of the nioties, an estimated two million people left their houses from five Sahilian countries – Burkina Faso, Mali Mauritania, Niger and Chad. Nouakchott, the capital of Mauritania saw a population increase fourfold in 1985 and Nigeria saw the unaccounted influx of people into the Borno area. Thus population explosion and migration in pursuit of means of livelihood by the Pastoralists, fisherman and environmental refugees as a result of desertification lead to competitions for scarce water resources in the basin resulting into violent conflict over land and related resources, as well as massive exodus to other areas. It is therefore not surprising that there has been an increase in the rate of communal clashes especially in relation to land for agricultural purposes. This has been summarized by Human Rights Watch (2001), Butler and Gates (2010), UCDP (2011) thus;

Land is also often at the heart of communal conflicts that centre on groups' main livelihood. One example is pastoralist conflicts, i.e. herder-farmer conflicts and conflicts between various pastoralist groups. Pastoralists and their animals move over extensive areas, often under extremely harsh conditions, and during this movement they often come into conflict with other communities that are either also on the move or more settled. Such conflicts constitute one of the oldest forms of organised violence in the history of mankind (Butler and Gates 2010:1). The eruption of such conflicts is compounded by the extreme conditions where access to grazing land or a well is often a question of survival for both animals and humans ...Similarly related to control over land, but fought along another identity dimension, are conflicts pitting the 'original' inhabitants of a locality against more recent settlers. For instance, many of the violent communal conflicts in Plateau state, Nigeria, have centred on this division. Among these are the recurrent eruptions of conflict in Jos,

the state capital. Conflict flared in Jos in 2001, 2002 and 2010 with the Hausa and Fulani on one side, and the Anagutas, Afisare and Birom on the other (UCDP 2011). The latter three groups are considered indigenous to the area, while the Hausa and Fulani are more recent settlers to the area and have become a significant minority, threatening the ‘indigenous’ groups’ dominance (Human Rights Watch 2001:5). This has led to spiraling conflict over local political power, control over land and access to public goods

On the other hand, Abbass M.I (2012), argued that the exacerbation of vulnerability and conflict in Northern Nigeria is both a product of the impact of climate change and drought on the environment leading to stiff competition for grazing and farming land between farmers and pastoralists. This has worsened trends of the Fulani pastoralists’ relationship with farmers as well as the intensity and magnitude of Fulani exodus southwards. The resultant effect is that these movements southwards in search for pasture land have caused widespread conflicts and destruction of human and animal lives as well as farmlands with adverse implications for the political economy. The above is aptly represented in the table below, which gives a statistic of conflict related to struggle over limited land for agricultural purposes and for grazing.

**Table III:** Selected Cases of Land Related Conflicts in Northern Nigeria and their Neighbours

s/no	Date	Location	Principal Actors
1	1984	Mangu – Fier	Land/Border Conflict
1	April, 1991	Tafawa Balewa (Bauchi State)	Started as a quarrel between a Fulani man and a Sayaya meat seller in Tafawa Balewa. Escalated into full blown violence and later took the colouring of a religious war in Bauchi. Several lives were lost and property valued over hundreds of million naira was destroyed.

2	October 1991	Tiv-Jukun ethnic crisis	conflict over land ownership and political domination
	1992 and 1995	Mangu-Bokkos	Conflict over land
3	May, 1992	Zangon Kataf (Kaduna State)	A command feud between the Katafs and the Hausa later took the dimension of inter-religious war between Muslims and Christians in other major cities of Kaduna State. Several lives were lost and properties were destroyed.
4	May, 1995	Kano (Kano State)	Communal violence triggered off by quarrel between Hausa and Ibo led the burning of houses, churches and shops and killing of innocent people.
5	1995	Gero in Jos South L. G. A	Conflict over farm lands
	1997	Bukuru Gyero Road	Conflict over land between the Birom and Hausa communities
	1997	Mangu - Changal	Land Dispute
	1997	Toto L.G.A	Land conflict between Bassa and Igbirra Communities
		Nassarawa State	Land conflict between the Tiv and Plateau communities in Doma, Awe and Keana
	Over a period of time	Mushu/Kwahasnat, Manja/Rubwol, Timnanle/Bandungang, Murish/Marish, Kombun-Nting, Dankargung (Jos Plateau)	All these conflicts were over Farm land/boundary issues
5	Thursday, July 22, 1999	Kano Reprisal Killing	Hausa/Fulani youth took vengeance on the killing of their Kith and Kin in Sagamu. Their target was the Yoruba community.
6	Friday, April 14, 2000	Ageragu Crisis (Nasarawa State)	Communal clash that started with a protest against the location of Local Government Headquarters.
7	July 2000	Tsagari Crisis (Kwara)	Clash between Tsagari and Share communities of Kwara State which claimed several lives.
8	Thursday, June, 28, 2001	Azara crisis (Nasarawa)	An ethnic conflict between the Tiv and the Azara indigenes. It started with gruesome killing of an Azara traditional

			leader, and later spread to the Tiv village with the Tiv community on the defense.
9	Friday, September 07, 2001	Jos crisis	A violent ethnic/religious crisis between the Muslim/Hausa Fulani and Christian/Indigenes. The subject of discord between the Jasawa Development Association and Plateau Youth council was over political appointment in Jos North.
10	Monday, October, 29, 2001	Tiv-Jukun/Fulani Conflict	An ethnic clash between Tives and Jukun/ Fulani which was an extension of the May 2001 clash and could be linked to the protracted dispute between both sides.
11	Friday, November 02, 2001	Gwantu crisis	A clash that started on a political ground (over the relocation of LG Headquarters later took on ethno-religious dimension in which places of worship were destroyed.
12	Sunday, December 30, 2001	Vwag crisis	A violent command conflict in Vwang district between the indigenes and non-indigenes,
13	January 18, 2002	Awe crisis	A renewed communal clash between two indigenous communities in Awe Local Government of Nasarawa State. The cause was not certain but two people were killed and several others injured.
14	Monday, May 27, 2002	Fulani-Irigwe crisis	An ethnic clash between the Hausa/Fulani and the Irigwe indigenes in Basa, Plateau which was said to be a reprisal attack.
15	Saturday, June 01, 2002	Yelwa-Shendam Mayhem (Plateau)	A fracas between the native people (predominantly Christians) and Hausa settlers (predominantly Muslims). This violence extended to about four Local Government Councils in Southern Plateau.
16	Monday, July 01, 2002	Wase (Plateau)	The Yehwa-Shendam riots spilled over to Wase.
17	Tuesday, July 01, 2003	Edo/Kogi	Communal clashed between border communities in Edo and Kogi State Ekepedo and Ogori over land ownership

18	Thursday, January 1, 2004	Ganye, Adamawa	Clash between Fulani herdsman and farmers over grazing lands
20	Sunday, February 1, 2004	Wase/Kanam (Plateau)	Violent clash between Mavo and Taroh communities, which claimed 11 lives. Suspect Taroh youth were allege to have raided Mavo villages.
21	Saturday, February 1, 2004	Wase/Kanam (Plateau)	Communal clash over land ownership between minda and Kparav groups. Several lives were lost.
22	Sunday, April 11, 2004	Lantang South (Plateau)	Continued clashed that led to the sacking of Taroh villages in Lantang South LGC by suspected Hausa-Fulani insurgents.
23	Monday, April 26, 2004	Bakin Chiyawa (Plateau)	Renewed hostilities launched by suspected displaced Fulani herdmen. The conflict was believed to be spill over the crisis that has been bedeviling southern Plateau Local Governments of Lantamg South LGC by suspected Hausa-Fulani insurgents.
24	Saturday, May 1, 2004	Yelwa Shendam, Plateau State	A fresh ethno-religious mayhem that claimed over 650 lives and over 250 women abducted by suspected Taroh militia.
25	Wednesday, May 12, 2004	Kano	Kano may hem flowing the Yelwa Shendam ethno – religios crisis in Palteau. Non Muslims were attached in reprisal of the Palteau crisis. Over 200 lives were lost and the traditional ruler of the area deposed.
26	Saturday, June 8, 2004	Konshisha/Gwer, Benue	Boundary disputes between neighboring Konshisha and Gwer communities. Thirteen lives were lost.
27	Tuesday, August 3, 2004	Quanpam, Plateau	Fresh outbreak of violence in Lankaka village. Suspected armed militia from neighboring state allegedly stormed the village community killing two and razing twenty houses.
28	2009	Jigawa state	Conflict over land between Hausa farmers and Fulani pastoralists in Miga, Kaugama, Birmin Kudu, Garki and Maigatari L.G.A's.
29	2009	Jigawa	Land conflict between the people and

			camel pastoralists from Niger Republic
30	2009	Udeni Gida, Nassarawa state	Land conflict between pastoralists' and farmers, leading to the death of more than 30 people, destruction of houses and crops
31	2009	Wasse L.G.A	Hundreds of nomadic Fulani pastoralists were expelled over land invasion
32	2010	Gwagwada District, Chikun, Kaduna	Conflict over land and cattle invasion on farm land
33	2010	Heipag, Barikin Ladi L.G.A	Over 700 cattles were killed through poisoning of pasture land and water

As a result of the above, there is a transformation of the relationship between the crop cultivators and pastoral *fulbe* (farmers) spontaneously changing from that of complementarily and trust to hostility, violence and wars (Abbass, 2012). Most of these clashes are actually over land and scarce natural resources, however, because of the tension in the country between Christians and Muslims, they often take religions coloration are often interpreted as such. However, a complete understanding of the origin of these conflict starts with an understanding of the drying Chad and the constant movement of people especially nomads into the area. The situation became even more worrisome with the outright tussle for the best land between the indigenous people and the settlers (Gaya S and Imran A, 2004, Akin A and Ashafa M (2004). In the case of Jos, scholars have argued that the so called Religious crises are not actually religious, but more of struggle over land (which could be tied to earlier migration and settlement)(Otite and Albert, 2004). Tanko, P.B (2006) summarized the situation thus;

Consequently, the best lands of Jos were developed as the property of .... the new arrivals and gradually the indigenous population, was technically pushed into the hinter land. Although each of the ethnic groups in Jos had their different cultures, the Hausa language became

dominant probably because Hausa men were more active in commerce and administration. Strikingly enough, the different cultural forms could not be dissolved into a common identity. Although all the indigenous groups retained their cultural identities, they also adopted the use of Hausa language for inter-ethnic complication. Gradually most... settlement began to bear Hausa names in place of the indigeous names e.g. Barikin Ladi in place of Gwol, Mai Adiko in place of Gut; Kantoma in place of Madimangul, Sabon Gidan Dan Yaya in place of K'ara

On the other hand, both Williams I et al, (2004), identified the Chad Basin area as a volatile one owing to constant clashes over limited land leading to the killing of Fulani pastoralist and stealing of their animals. Available evidence from research shows that farming villages like *Kaska* experienced *Toubou* raids annually, while Fulanis from Niger and other parts of western and central Africa constantly invade the area for land leading to conflict. There is also the *Garbi* area well known as a meeting point of leaders of the pastoralist and the fishermen who compete for claims in the Fadama. All these have been as a result of the ever shrinking Chad and the mass movement of people away from the area to source for survival. This thus indicates the serious effect of climate change on the people and its contribution to conflict in the area. The point therefore is that there is the urgent need to curtail and contain these movement and conflict through minimizing the effect of this on the people.

## **Conclusion and the Way Forward**

From the discussion so far it is clear that although, historically the shrinking Chad have brought people together and to some extent allowed

for inter/intra group relations on the one hand; on the other it has led to conflict and crisis over fertile land and other agricultural resources, a situation which is still paramount in Nigeria till date. There is therefore the need to help curtail the effect of climate change on the Lake Chad which in turn means help to curtail the mass movement of people away from the area. This is important because of the conflict and crises, this has led to in modern time. This is appreciated more when seen in the light of Marisancho Menjón's "The Disappearing Lake", which summarized the impact thus thus;

A lake that is relentlessly disappearing... threatening advance of the surrounding desert. Dry rivers leading nowhere because their flows are squeezed to the last drop... It is not surprising that Lake Chad is described as the "African Aral Sea." In both cases, a globally significant water body is disappearing. Lake Chad was once the sixth-largest lake in the world, but over the past four decades, it has shrunk to about a tenth of its former size. The vanishing of Lake Chad is usually ascribed to climate change. However, this is not the only factor. Once again, mismanagement of water resources is involved. The lack of vision in the management of the river, and a lack of understanding that an intervention upstream will always have repercussions downstream, has generated serious problems that fall, as always, on the backs of the very poorest... The lake's recession is threatening the survival of thousands of people.

As it is today, it has been established that the ongoing Climate change is affecting the Lake Chad water which sustains the lives of over eight million people that are depending on it mostly pastoral farmers, fishermen, the Kanuri, Mbororo and the Tuareg indigenous communities among others, and adaptation to this natural catastrophe or disaster is further compounding the situation. It is also not surprising how the rate

of deforestation, desertification and hydro electric dams constructions among other human activities influenced by adaptation to this climate change are increasing in the region and how its impacts are affecting the indigenous communities and other rural dwellers living around the lake, leading to land conflict. This situation has been reechoed by the Nigeria ministry of Water Resources, during the 48th Lake Chad Day celebration in Abuja (2012). It observed that the lake has receded to 5 per cent of its size in the 1960s. It is sad that more than 30 million inhabitants of the area who solely depend on the natural resources of the lake are seriously suffering from poverty, health problems, as well as insecurity. According to the minister, the lake receded from 25,000 km<sup>2</sup> in the 60s to the present less than 2,000km<sup>2</sup>, a development that is blamed on climate change, decreased rainfall and increasing water demand for agricultural activities. The position of the Minister is summarized thus;

The lives of 15 million Nigerians are in jeopardy is worrisome. Also at risk are about 10 million others living outside Nigeria's shores of the lake. The Lake Chad problem has for long been treated with official indifference, with government paying no more than lip service to the grave issues arising from the lake. Yet, such attitude that has also applied to desertification in the northern part of the country is tantamount to postponing the proverbial evil day. To forestall dreaded ecological refugee situation that is potentially high in the area, the time to tackle the problem is now.

It is in line with this that this paper recommendation the following towards adapting to this climate change while protecting millions of peoples from this ongoing disaster.

- Since the geology of the Lake Chad basin is indicating that the basin is holding one of the world's largest reserves of

underground water, The United Nations in collaboration with the governments of the member countries of the “Lake Chad Commission” should jointly source for fund and invest in redeveloping the Chad basin area, through modern irrigation agriculture water project like the one commission in Libya in the early 1990’s.

- For a start, the Federal Government should, as matter of urgency, seek sustainable ways of bringing succour to Nigerians in the Lake Chad Basin. Lake Chad is historic in Nigeria, and has served as a major source of livelihood to members of the surrounding communities.
- The governments of the member countries of the Lake Chad Commission in collaboration with the African Union (AU) and the Economic Community of the West African State (ECOWAS) should encourage and attract foreign investment into the Lake Chad area to help revive the Lake. In line with this, there is the need for the Lake Chad research institutes be properly funded.
- The United Nations Environmental Program and relevant stakeholders on water issues should assist in their capacities and technical know-how in preventing the pollution of the lake from the newly emergent petroleum industries within the Lake Chad basin. Expert on climate change should be organizing series of educative Conferences, seminars, workshops and training on climate change and adaptation. The indigenous communities should be mainstreamed into the decision making processes in reviving the lake as well as fighting climate change.

In line with the above therefore, there is the need to ensure awareness at the international level so that experts, governments and all other stakeholders can contribute to prevent the adverse effects of climate change and to ensure a stable development of the Lake Chad area as

well as other communities depending on this lake for their survival. This will go a long way in curtailing and containing conflict in the region.

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