

# **The Impacts of Global Climate Change in Africa: the Lake Chad, Adaptation and Vulnerability**

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## **Key words**

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## **Abstract;**

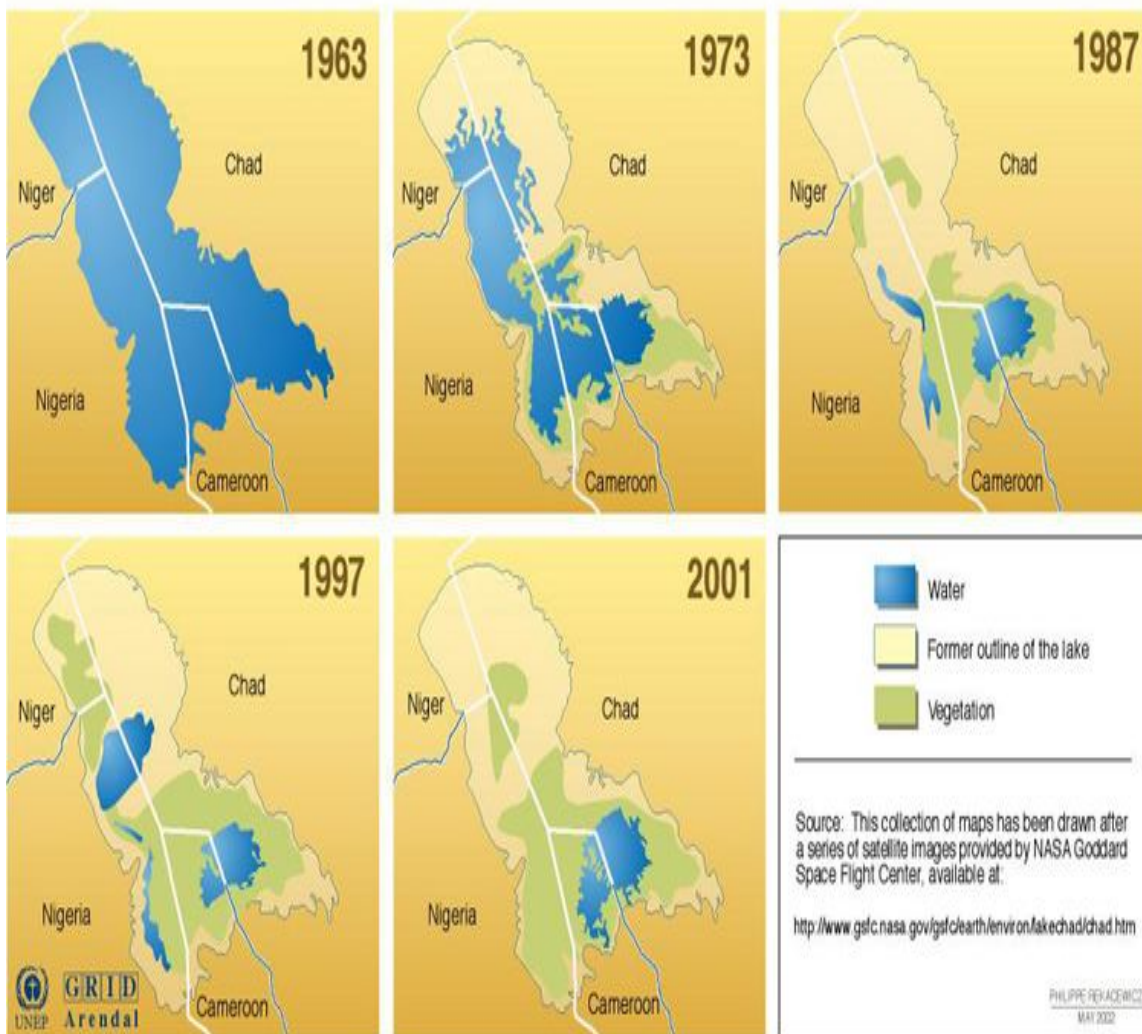
The ongoing Climate change is affecting the Lake Chad water which sustains the lives of over eight million people that are depending on it mostly pastoral farmers, fishermen, the Kanuri, Mbororo and the Tuareg indigenous communities among others, and adaptation to this natural catastrophe or disaster is further compounding the situation. This research work discovered 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, this trend resulted in numbers of recommendations towards adapting to this climate change while protecting millions of peoples from this ongoing disaster. Further this project aimed at ensuring 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 Africa and the indigenous as well as other communities depending on this lake for their survival.

## **Introduction**

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.

## The Disappearance of Lake Chad in Africa



It was in view of the above, I came up with the under listed suggestions/recommendations:

1. 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.

2. The River Congo in the Democratic Republic of Congo presently flowing in to the Atlantic Ocean and which was geographically thought to be among the ancient or earlier major feeder rivers of the Lake in the past, should be diverted to be flowing in to the Lake again.
3. 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.
4. The Lake Chad research institutes should be properly funded.
5. Non-agricultural investments should be encouraged in order to avoid the growing pressure on fishing on the already drying lake.
6. Lake Chad University should be established by all or any of the stakeholders in order to provide jobs, promote research and education for the children of the inhabitants.
7. Since oil prospectors are already discovering new oil fields within the Lake Chad Region as in the case of the Lake Chad basin areas of the republics of Chad and Niger, the Lake Chad commission should ensure the employment of the inhabitants of this area is given an upper priority in this new emergent petroleum industries in order to reduce pressure and over dependence on this Lake.
8. 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.
9. The indigenous communities should be mainstream into the decision Making processes in reviving the lake as well as fighting climate change.
10. Expert on climate change should be organizing series of educative Conferences, seminars, workshops and training on climate change and adaptation.

I believe that if the above-mentioned suggestions /recommendations are adopted and implemented it will help protect the Lake Chad from completely drying up

in one hand and save the lives of millions of people and animals depending on the Lake for their survival which is facing the impacts of climate change.

Thanks for listening.

#### References

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