

Climate Change - An Introduction

Most in Nigeria tend to agree that it is hotter today than it was 20 years ago. There also seems to be a consensus that this is not the worst of it, given that weather patterns are becoming more unpredictable. Yet, the climate change discourse is hardly gaining traction in the country. The terms greenhouse emissions, rising sea levels, carbon footprints, etc., bandied around globally or in environment lobbies are somewhat alien to the average Nigerian who is struggling to eke out a living. We tend not to pay much attention to this global phenomenon possibly because of the economic hardships we contend with. Not having conquered our basic needs, as a people, perhaps the irony that climate change impacts heavily on the economy and stunts socioeconomic development is lost on us. Climate change seems a somewhat esoteric and distant concern left largely for the Global North to concern itself with. In Nigeria, as is the case the world over, climate change has impacted heavily on our way of life, and our economic and social development. Across the country we deal with very direct impacts of climate change, from desertification to drought, to floods, to its consequences such as insecurity, food scarcity, disease, etc., curiously, there is no sense of urgency, no outrage, no real awareness.

Climate change is one of the most fiercely discussed issues of our time, the world is on the cusp of a revolution that will change the way we undertake economic activities, provide and use energy, which will alter the trajectory of humankind for the better and impact positively on future generations. Sadly, the African continent is paying scant attention and not learning anything from the previous revolutions it missed out on which caused its current socioeconomic circumstances.

In trying to understand why Nigeria, and indeed most of Africa, is not invested enough in this subject and why even the most educated of us are barely interested in this subject, one has to question how much we really know about it, as interest and involvement are borne from having a clear grasp of issues.

This paper is a high-level outline introduction to the concept of climate change in Africa, breaking down some key issues involving this phenomenon, effect on Nigeria and by extension the West African region. It is by no means an expert's view but an attempt to shed light on why climate change is important, its implications for Nigeria, why it must be accorded the seriousness it deserves, and pragmatic and effective policies.

What really is climate change and why should we care?

Down through the millennia, the earth's climate has constantly been changing with consequences for all life forms that rely on it for their survival. It is incontrovertible that

human activities have caused a significant percentage of the energy and gases emitted that have contributed to the warming of the earth. This warming has been occurring slowly over time in a barely perceptible manner as the planet evolved organically. However, over the last 200 years, in the wake of rapid global industrialization and urbanization, there has been an unprecedented rise in the average global temperature. This is the warmest the world has been in approximately 125,000 years according to the data collected by scientists^[1]. The earth has suffered untold hardship to indulge our relatively new habits. Why is this post-industrialization lifestyle so harmful to the environment one might ask? Have all advances in technology not enhanced our lives? It is incredibly harmful, for the simple reason, that to power this new way of life we burn fossil fuels – coal, oil, and gas – for energy – that release carbon dioxide and other greenhouse gases into the atmosphere. A second major contributor to greenhouse gas accumulation is the felling of trees and the clearing of forests for agriculture, as trees function to capture the carbon dioxide that otherwise exists. These greenhouse gases are not good news seeing as they upset the natural balance of the earth's climate by trapping heat, causing the environment to warm in an unnatural and alarmingly rapid manner. The effects of this rapid rate of warming include melting polar caps, which we may be forgiven thinking are far and remote from our existence, but key consequences are rising sea levels, which have wreaked havoc in Lagos, resulted in floods in Kebbi, erosion in the South-East, drought and sandstorms in the northern most part of the country, not to mention unpredictable precipitation patterns, forest fires, and many more negative consequences.

According to NASA, the average global temperature is up 1.9 degrees Fahrenheit (3.4 degrees Celsius) since 1880, and between 1880 and 1980, it rose on average by 0.07 degrees Celsius (0.13 Fahrenheit) per decade.^[2] Since 1981, however, the rate of increase has more than doubled: In the last 40 years we have seen the global annual temperature rise by 0.18 degrees Celsius/0.32 degrees Fahrenheit per decade.^[3] While the global goal is to limit the rise to 1.5 degrees Celsius by 2050, from calculations made if we continue our harmful behaviour, it looks set to rise by 2 degrees Celsius before 2040. Quite frankly, this may seem almost infinitesimal and one would wonder what all the fuss is about however, the difference between half a degree and a degree in the negative impact it has is staggering, so the experts explain, faster rising sea levels, scarcity of freshwater, severe heat, and air pollution which would spell death for millions.

Bringing it to relatable terms, in 2013, a team of climate change research fellows and scientists likened the energy from the emissions as currently constituted to the equivalent of four atomic bombs the size of Hiroshima going off every second.^[4] The scientific community have adopted this stance and as of 2020 contend that we are now at 5 to 6 bombs per second.^[5] We do not feel the impact or the heat because the oceans absorb almost all of the

shock, hence the rising sea levels, melting arctic and existential threat to life as we know it. One can hardly visualize the untold damage a single atomic bomb going off would do much less approximately 400 thousand – daily! With this horrific imagery in mind, it would appear that the sense of urgency globally makes an awful lot of sense.

What this means for Nigeria

Regardless of its laissez-faire attitude towards this global phenomenon, Nigeria is in the eye of the storm and has much to lose if it does not get fully on board. As a country in sub-Saharan Africa, the implication of increased warming above the 1.5 degrees Celsius mark would be profound because although we speak of average global temperatures, the increase would not be spread evenly, already hot regions such as sub-Saharan Africa are projected to get even hotter, spelling disaster of unimaginable proportions. The floods and droughts the country has experienced over the years would worsen and rainfall will become increasingly unpredictable. This will impact negatively on the agriculture sector which is dependent on rainfall. This does not bode well for the country as this sector employs two-thirds of the entire working population. More importantly, low yields in agriculture mean food shortage which ultimately causes economic decline as food shortage drives up the cost of food, creating inflation, more suffering, more hardship on the poor and indeed the entire country.

If examined carefully, one would see that we are already suffering some of these consequences in Nigeria. In September 2020, Kebbi state flooded and with it, 50 thousand rice farms were lost, this threw the country into a food crisis as the price of rice quite naturally skyrocketed. There was also drought in the North-Central which affected farming, and consequently, food security. There had been several other floods and droughts in the preceding years displacing millions, and with the deepening effects of climate change, in the near future what we face today may be considered trivial in terms of proportions.

What about desertification? This is already causing insecurity in the country, as herders from the northern parts of the country who are moving southwards quite literally in search of greener pastures are clashing with farmers. These conflicts have led to the death of thousands and get uglier and deadlier within each season. It is quite safe to posit that these conflicts will only get deadlier with increasing scramble for natural resources due to the effects of climate change. Today insecurity is the bane of the country and the resultant instability slows down regular economic activities, discourages foreign investment and generally makes Nigeria a difficult country to live in. Imagine it getting worse.

What the world is doing about climate change

Since the 1980s, there has been a heightened awareness of climate change, and debates as

to how to handle climate change have been ongoing. To this end, several accords have been reached, key of which is the United Nations Framework Convention on Climate Change (UNFCCC) with its decision-making body, the Conference of Parties (COP), which meets annually; the Kyoto Protocol, and the Paris Agreement. These conventions aim to assess climate change issues and prescribe practices that countries who are party to the accords would adhere to to mitigate the effects of climate change on the environment. So far, remarkable progress has been made, technological innovation has changed its trajectory completely, emphasis is on green energy, and plans to phase out combustion engine vehicles and fossil fuel-dependent equipment are underway. The world is going green, lifestyles are changing, recycling is a way of life for citizens of the Global North, this is not anywhere near enough as Asia and Africa with our massive populations have to get on board for the goals to be achieved, but still, progress is being made.

In 2013 Nigeria initiated a climate change policy – National Policy on Climate Change (NPCC) and it is also a party to the Paris Agreement which it ratified in 2017, the government pledged to reduce its greenhouse gas emissions by 45 percent with the condition of international support by 2030^[6], this would appear quite ambitious as in 2015, Nigeria was the world's 17th highest emitter of greenhouse gasses, the second highest in Africa after South Africa^[7]. Our heavy reliance on revenues from oil and gas exports suggest that this will be no mean feat to accomplish as Nigeria creates severe environmental pollution and CO₂ emissions due to its gas flaring in oil and gas production.

Climate change is real. Its consequences are real. We should pause for a second and think of the world we want to leave for generations to come. With all the degradation and abuse to the environment do we consider ourselves responsible custodians?

Nigeria and indeed the entire African continent cannot afford to leave it all to providence or the suffering in the future would be unbridled, also having recognized this as a revolution and the next frontier it would be in our best interests to participate fully or we will surely be left further behind than we already are and will never get another chance to catch up with the rest of the world. It is indeed hotter today, how we proceed going forward will determine how much hotter it will be, literally and figuratively in 20 years to come.

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