

## CLIMATE CHANGE IN AFRICA: KEY ISSUES, GLOBAL SOLUTION AND AFRICA-BASED STRATEGIES

OMOJOLA ImmaculataOlu, (SSMA), PhD

Eudoxia Research University

New Castle, USA

omojolassma@yahoo.co.uk

DOI: [10.13140/RG.2.2.31712.66569](https://doi.org/10.13140/RG.2.2.31712.66569)

### Abstract

*The main challenges, a global solution, and African-based methods were covered in this essay on climate change in Africa. It made an effort to identify the main problems with climate change while putting forth several plans and solutions to deal with related problems. Climate change is defined as an increase in humidity and temperature that has a particularly damaging impact on the environment. Some of the most significant repercussions of climate change that have been documented include excessive heat, strong storms, more frequent droughts, a warmer and rising ocean, a shortage of food, health risks, poverty, and eviction. Later, it was advised that individuals and the government work to minimize further damage and avert the worst effects of climate change by raising awareness of the issue. The phenomenological approach of inquiry was employed in this investigation.*

**Keywords:** Climate change, Africa, Key issues, Global solutions, Africa-based strategies, severe storm, drought, lack of food and awareness.

### Introduction

Climate change is the steady increase in global temperatures that ultimately produces adverse repercussions or effects on the climate system. It is imperative to keep in mind that the climate system is dynamic. It frequently manifests artificially and organically. That is, as a result of both the planet's climate and human activities like population expansion, urbanisation, and forestry. Ndubisi and Chukwudebelu (2020) identify industrialization, deforestation, population increase, conflict, and agriculture as the primary contributors to climate change. Volcanoes, fluctuations in solar radiation, and the decomposition of organic matter were among the additional contributing reasons to climate change that were suggested.

There will never be a one-way fix for this issue, though. A lot of the afflicted countries, especially in Africa, have been putting out plans for combating climate change in their unique contexts. All proposed solutions to the climate catastrophe invariably start with raising public awareness of it. As a result, those who are affected will be able to stay informed about their surroundings. Humans have learned to adapt despite the severe effects of climate change since danger is a natural element of existence. In addition to other factors, there might occasionally be hotter weather, stronger storms, more drought, a lack of food, elevated health risks, destitution, and displacement.

### **Understanding Climate Change**

Humidity and temperature levels, which have a particularly severe impact on the ecosystem, are greatly influenced by climate change. Jackson 2023 views climate as the general description of the weather in a location, taking into account factors like temperature, precipitation, humidity, and windiness. In a further development, Jackson defined climate as the average condition, variability, and windiness over a long period. Both definitions accept that the weather is always changing as a result of atmospheric instability.

It is easy to predict whether it will be windy, hot, or moist because of atmospheric instability. Human activity will, however, experience both positive and harmful repercussions of climate change. For instance, if it's hot outside or the sun is out, things which individuals want to eat will dry out, and humans can obtain vitamin D from it, but if it's too hot, it will be unpleasant and can harm the skin. Even though it is chilly yet conducive for restful sleep, it may require days for items to air out outside in moist weather. On the other hand, dwellers of the desert are granted access to fresh water during heavy rains, and crops expand rapidly. Floods can result from too much rain, which can be harmful to both persons and property. Strong storms can demolish structures. Weather variations can therefore have an impact on people's life, daily schedules, and surroundings at any moment.

In line with this, Omojola and Kanu (2016) noted that when erosion destroys homes and real estate, environmental change can result in population relocation. Food and drink shortages are sometimes caused by excessive rain or bad weather. Health problems can also result from high temperatures that can lead to skin cancer or from an abundance of

stagnant water that might support malaria-causing mosquitoes. Their analysis concluded that "climate change occasionally has effects on humans and its surroundings. In demoralised and dispersed communities following climate-related scenarios, these impacts manifest as trauma, diseases, nutritional issues, and other problems (p. 87).

### **Key Issues in Climate Change**

Humans are accustomed to climate change since it has permeated them throughout history. The term "climate change" has historically been employed to describe any shifts in the weather, whether they be greater temperatures, more intense storms, increased drought, a heated rising sea, a lack of food, health concerns, poverty, or displacement. These crucial climate change topics will be covered in the sections that follow:

**Increasing Temperatures:** The global surface temperature rises along with glasshouse gas concentrations. In Omojola and Kanu (2016), Balbus stated that hotter days, more rain, and more humidity would create more ticks, which spread transmissible illnesses like Lyme disease. That might have an enormous effect on human health.

**More powerful storms:** One of the results of climate change is a powerful storm. It frequently leads to hurricanes, which have always claimed lives, destroyed property, and left people jobless and homeless. Florida is the most hit state and is known for its hurricane problem. 2007 (Barnes).

**Increased drought:** This is just another issue brought on by climate change. When there isn't regular rainfall, the soil becomes completely dry to the point where any interaction, like ploughs, would generate a lot of dust. Drought has a substantial impact on human health, according to Omojola and Kanu (2016), who are talking about climate change and the African environment. They state that "Trauma from floods, droughts, and heat waves can lead to mental health issues like anxiety, depression, and suicide" (p. 83).

**Food Shortage:** Among the consequences of climate change is a food shortage. Land that can be used for agricultural cultivation is destroyed by flooding and heavy rains. The drought hurts both the availability

and supply of food. All of these increase the difficulty of relying on a steady supply of food, driving up the price of everything else.

**Health risks:** Climate change hurts human health. Many infectious diseases have become prevalent in the changing climate era. Pachauri and Meyer assert in Omojola and Kanu (2016) that it is more difficult to stay hydrated on substantially hotter days. They are linked to electrolyte abnormalities, renal failure, and renal stones. Rising temperatures and the weakening of the ozone layer both raise the risk of skin cancer. Heat is linked to an increased risk of salmonella and campylobacter epidemics. Extreme precipitation may contaminate water sources. Those toxic algae blooms that thrive in warm areas might cause digestive problems. Therefore, any temperature changes may be harmful to people's health.

**Poverty and displacement:** Climate change can cause crises that leave people impoverished and perhaps forced to flee their homes. This may occur if property destruction spurred on by the effects of climate change affects those lacking immediate help. It can be frightening! It may also result in displacement, forcing people to leave their homes and search for alternative places and ways of life.

### **Global Solutions to Climate Change**

**Increasing awareness:** The government needs to undertake greater sensitization. As a result, those who are affected will be able to stay informed about their surroundings.

**1. Deforestation And Committed To Restoring Damaged Ecosystems:** Since deforestation has aided in the escalation of global warming, there is a greater need for organizations that encourage the planting of trees.

**2. Promote the use of electric vehicles, public transportation, and other non-motorized modes of transportation:** Reducing the glasshouse gas emissions from fuel-powered motor vehicles requires widespread use of electric vehicles, public transportation, as well as walking, biking, skating, and scooting.

**3. Address Poverty and Other Inequalities That Increase Vulnerability:** Due to historical marginalization, women, the disabled, children, the elderly, people living in poverty, and indigenous peoples

are among those who are disproportionately impacted by climate change. When it comes to choosing the best ways to combat climate change in their local communities, people must take part in the decision-making process as well.

4. The greatest risks posed by the climate problem can be mitigated by eliminating poverty and other institutional inequities that grant some people more access to resources than others.

5. **Invest in disaster risk reduction: DRR**, also known as disaster preparedness and response, safeguards the lives and livelihoods of people and communities who are most at risk from emergencies and disasters, whether human or natural causes are to blame for the problem.

### **Africa-Based Strategies for Climate Change**

A complex interplay of global weather systems from far-flung regions of the planet and the continent itself regulates the climate of Africa. These systems' interactions have not yet been thoroughly investigated and comprehended.

The two largest predicted drops in rainfall on the planet are likely to occur over northern Africa and the southwestern regions of South Africa. No other region of the world has endured droughts that have lasted as long or covered as much ground as Africa. The expected rise in precipitation in East Africa contrasts with the actual increase in precipitation experienced during droughts.

Different sub-regions of Africa are affected, thus complicating the crises. Summer rains in southern Africa begin later and end earlier than in other parts of the world. The second largest rainforest in the world after the Amazon, Central Africa is a sub-region that drives the rest of the planet's system and is now dangerously close to the rainfall minimum required to support it (Niang et al., 2014).

According to the aforementioned document of the African Union 2020–2030, the following are produced as the solutions for combating climate change in Africa:

1. Improving Africans' well-being and enhancing the institutions' effectiveness, competence, and capabilities.
2. By adopting climate-smart agriculture (CSA) by 25 million African farmers by 2025, the Africa Climate Smart Systems Agricultural Version 25x25 intends to build a healthy national and regional food system and empower rural communities.
3. Supporting environmental preservation, sustainable resource management, and climate resilience.
4. Making inexpensive and sustainable energy more accessible.
5. Growing the production and use of knowledge and innovation while advancing the scientific and technological development of African economies.

### **Recommendations**

Based on the arguments above, the following suggestions are made:

For a better environment, the government should insist on the proper implementation of these suggested climate change measures.

1. Those that live in climate change-affected areas should support the government's attempts to tackle the situation.
2. An immediate report should be filed if there are issues related to changes in the climate, particularly in remote regions.
3. Affluent people should assist those in need by donating palliatives.

### **Conclusion**

The main challenges, a global solution, and African-based methods were covered in this essay on climate change in Africa. A few of the factors contributing to climate change are industrialization, deforestation, population growth, and conflict. Some of the major effects of climate change are higher temperatures, stronger storms, more frequent droughts, a lack of food supply, health risks, poverty, and relocation. Global efforts have been made to offer a solution to climate change by committing to repairing damaged ecosystems, embracing electric vehicles, public transportation, and other non-motorized options for transportation, addressing poverty and other inequalities that increase vulnerability, and investing in disaster risk reduction. As one strategy to slow down climate change, efforts have been made throughout Africa to make it easier for people to access affordable and sustainable energy. The conclusion that followed was

that kindhearted people ought to assist those in need by providing palliatives.

### References

- Stephen T. Jackson (2023). Climate Change: Definition, Causes, Effects and Facts. (Retried 18/3/2023) From <https://www.britanicca.com./Science/Climate-Change>.
- Ndubisi E.J.O and Chukwudebelu P. (2020). Impact of Climate Change on Africa in Kanu I.A and Ndubisi E.J.O (Eds). Climate Change in Africa- Problems, Prospect and Perspectives. A Publication of the Association for the Promotion of African Studies. (APAS). Pgs 101-199.
- OmojolaI.O. and Kanu I.A. (2016). Climate Change and the African Environment. Tansian University Journal of Arts, Management and Social Sciences (TUJAMSS). Vol. 3. ISSN: 2449-0334.
- Kanu, I. A. and Emoit P. O. I. (2016). "Africa and Climate Related Disasters". *Tansian University Journal of Arts, Management and Social Sciences*. Vol. 3. pp. 1-8. A publication of the Faculty of Management and Social Sciences, Tansian University.
- Kanu, I. A. and Emoit Peter O. Imatari (2019). "Food Security in Arid and Semi-Arid Lands in Africa". *Journal of African Studies and Sustainable Development*. Vol. 2. No. 8. pp. 50-83.
- Kanu, I. A. and Emoit Peter O. Imatari (2019). "The Question of Food Security in Arid and Semi-Arid Lands in Africa: Indigenous Knowledge and Implementers of Development". *Journal of African Studies and Sustainable Development*. Vol. 2. No. 8. pp. 190-200.
- Barnes, Jay (2007). Florida's Hurricane History. Chapel Hill Press. ISBN 978-0-8078-3068-0.(Retried 18/3/2023) From <https://www.bing.com/search?q=florida+cities+affected+by+hurricane>Draft Africa Climate Change Strategy2020 - 2030.[https://archive.uneca.org/sites/default/files/uploaded-documents/ACPC/2020/africa\\_climate\\_change\\_strategy\\_-\\_revised\\_draft\\_16.10.2](https://archive.uneca.org/sites/default/files/uploaded-documents/ACPC/2020/africa_climate_change_strategy_-_revised_draft_16.10.2)