

Desertification and Conflict in Africa, 1970 – 2020

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Abstract

Desertification is a fundamental challenge and threat to Africa's sustainable development. Over the last forty-five years, it has become a great concern to African governments and populations. African States that are vulnerable to desertification include Algeria, Burkina Faso, Chad, Mali, Niger, Mauritania, Nigeria, Sudan, Eritrea, Egypt, Libya, Morocco, and Tunisia, to mention a few. The difficulties of desertification adversely affect food security, economic activities, natural resources, and the environment. It created conflicts in Africa by giving rise to a situation where the people's means of livelihood in the areas affected by desertification are threatened. Desperate to survive, they move to an area not affected. It resulted in conflict between those who migrated from the area affected by desertification and the Aborigines of the area they migrated to. This research, therefore, examines the relationship between desertification and conflicts in Africa. Using the qualitative method of research, the study finds that African desertification results from climate change and the desert nature of two-thirds of Africa, poor farming systems like continuous cropping, overgrazing, deforestation, and complete dependency on land resources by low-income people. The study argues that because the African economies are agro-based, desertification leads to migration and land encroachment, resulting in conflict in Africa. The paper recommends an expanded government policy of afforestation and a farming system like bush fallowing.

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Background to the Study

Desertification is becoming a global discourse because scholars have discovered a link between it and violent conflict. Since there is a nexus between conflict and desertification, international attention has been shifted to this arena. Tor Benjamin notes that "with climate change becoming a leading global political issue, the idea that there is a close link between global warming and violent conflicts has also caught international attention".¹ Africa is an excellent example of climate change-driven conflicts. The former Secretary General of the United Nations, Ban Ki-moon, notes a connection between climate change and the war in Darfur.²

Africa has experienced a setback due to the challenges of desertification, which is why it has become a great concern to African governments. Countries that are prone to desertification in Africa include Burkina Faso, Mali, Algeria, Chad, Niger, Mauritania, Nigeria, Sudan, Egypt, Eritrea, Libya, Morocco, and Tunisia. Franklin Lisk attributed Africa's inability to combat the challenges of climate change to the level of poverty on the continent. Africa is the poorest continent in the world, and poverty has posed a stumbling block to coping with the socio-economic challenges of climate change.³ In Africa, desertification has been known to induce migration, which results in conflict and even war, and endangers people's livelihoods, population displacement, and insecurity on the continent. In the twenty-first century, African states have been attacked by different armed groups, and many scholars have attributed this to desertification. Desertification has threatened the availability of arable land and natural resources.

Desertification has led to an increase in the movement of people from affected areas to unaffected areas. The word 'Sahel' as a geo-political form became popular in post-colonial times after the significant droughts that hit the region in the 1970s and 1980s. Most areas affected by desertification in Africa's means of livelihood depend on agriculture and pastoralism. Luka Raineri notes that:

*Policy and media discourse increasingly believe that a causal link between climate change and armed conflicts may exist. Building more explicitly on the Malthusian assumption that population growth erodes the sustainability of ecosystems and will lead to the exhaustion of natural resources, the so-called climate conflicts nexus hypothesis argues that climate change, in combination with population growth, leads to environmental degradation and dwindling natural resources, which in turn fuel increased competition and conflict escalation.*⁴

Since the people of the area affected by the desertification are predominantly pastoralists and farmers, the competition for forage, land, and water compels them to move to new places in search of greener pastures and resources in desperation to survive. This has led to conflicts between the indigenous peoples and the migrating groups. This paper examines the nexus between desertification and conflicts in Africa. The paper is in five sections. It begins with introductions, followed by conceptual clarification. The third

section discusses desertification as the cause of conflicts in Africa, the fourth section discusses the impacts of the disputes on African states, and the final section is the conclusion.

Conceptual Clarification

Desertification

It has been challenging to define desertification due to the various definitions. The United Nations Convention on Combating Desertification (UNCCD) defines desertification as "land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climate variation and human activities."⁵ This definition has been criticised for lacking explicitness, failing to emphasise biological processes, and neglecting economic, political, and socio-cultural aspects of desertification. The 1983 World Commission on Environment and Development (WCED) defines desertification more holistically by considering economic, political, and socio-cultural factors in the conceptualization of desertification. WCED saw desertification "as the process whereby productive arid and semi-arid land is rendered economically unproductive".⁶ Junti and Wilson note that the WCED broadens the concept of desertification by including the socio-economic context of the area affected by desertification. They argue that the definition aligns with the United Nations Environmental Programme (UNEP), which conceptualized desertification by giving a high premium to the effects of desertification on the people rather than on the land.⁷

The Webster's comprehensive dictionary defines desertification as "the process of becoming a desert."⁸ In 1982, Rozanov saw desertification as "a process of irreversible change of soil and vegetation of dry land in the direction of aridization culminating in the conversion of land into desert".⁹ It became pertinent to see desertification as a result of biological, chemical, and physical contexts. However, scholars emphasise man-induced desertification, such as overgrazing, deforestation, farming practices like continuous cropping, urbanization, and other land use types by man. Desertification is a process whereby fertile land is transformed into a desert. The causes of desertification include climate change and human activities like deforestation and improper land management. Eric Ralls sees desertification as a "form of land degradation in which a comparatively dry land area becomes increasingly arid, normally losing its bodies of water along with its wildlife and vegetation".¹⁰ Despite the controversy over the concept of desertification, the Princeton University Dictionary conceptualizes it as "the process of fertile land transforming into desert, typically as a result of deforestation, drought, or improper/inappropriate agriculture, "which is widely accepted."¹¹ Desertification leads to a reduction in plant and animal species, loss of water and soil fertility, and an increase in erosion. Desertification has adverse consequences for people and societies. Lack of access to essential resources, such as food and water, loss of soil fertility, loss of forest and biodiversity, and adverse weather conditions like floods, droughts, and storms affect the lives of the people who respond in different ways and can lead to conflicts. Jürgen Scheffran et al. note that the "change of climate was a risk multiplier or threat multiplier that exacerbates existing problems, including violence, terrorism, civil war, and forced displacement."¹²

Conflict

Conflict is indispensable in human existence. Therefore, there must be conflict in any society, organization, or state. David J. Francis sees conflicts "as the pursuit of incompatible interests and goals by different groups. Armed conflicts are the resort to using force and armed violence to pursue incompatible and particular interests and goals."¹³ Ochunya Ojiji argues that for conflict to occur, "one perceives the action of another party as blocking the opportunity for the attainment of a goal".¹⁴ Two conditions must be satisfied for a conflict to exist: group incompatibility and the chance for interference and blocking. Interference is any action detrimental to the attainment of the goal, and incompatibility is the opposing goal being pursued by two parties. A conflict can be defined in terms of needs or actions between parties. The need or wants may be practical, such as a conflict over land, where a party hopes the contest will be settled. It may be conflicts over beliefs and attitudes.¹⁵ Conflict occurs when two or more parties have opposing interests or values. Opposing or incompatibility of values results in distrust and suspicion. Conflict is a characteristic of modern societies. Exodus Emma maintains that "a conflict exists when two people wish to carry out mutually inconsistent acts."¹⁶

There is bound to be friction whenever two or more parties come together for a particular course. Conflict ensues when any of the party's senses that the other party wants to act to destroy its interests. Therefore, the threat of the destruction of interest or value can make the party whose interest is threatened feel insecure. It is at this stage of insecurity that conflict can degenerate into violence. Elija Terdoo Ikpanor defines conflict "as an attitude, a behaviour or an action or a process that introduces strain and stress in the relationship between two or more parties on, say, the attainment of a set of interests or goals."¹⁷ In Africa, desertification has threatened the livelihood of the people, and in desperation to survive, the people migrate to a new place. This has resulted in a situation where the migrating groups are seen as threatening the Aborigines.

Desertification and Conflicts in Africa

The claim that desertification has been responsible for African conflict must be considered. Benjaminsen argues that there is a connection between climate change in the Sahel and disputes between herders and farmers.¹⁸ Homer-Dixon notes that scarcities of environmental resources, notably fresh water, forest, and cropland, are contributing to mass violence in several areas of the world.¹⁹ Ehiane and Moyo argue that "Climate impacts are undermining human security because of the increase in the frequency and intensity of extreme weather events that are gradually reducing the quantity and quality of natural resources required for sustainable livelihoods".²⁰ Ikpanor attributed the conflict witnessed in the Benue Valley in Nigeria in recent years to the migration of herders from other ecological zones:

Recent years have seen an upsurge in violent conflict between herders and farmers, driven by the region's rich economic potential, which has attracted herders from other ecological zones, including Chad, Niger, and the Cameroon Republic. Indeed,

*violent conflict became widespread between the host farmers and the arriving farmers and herders, resulting in several killings and destruction.*²¹

The ecology of Northern Nigeria has been adversely affected by climate change. Many parts of the North have been turned into a desert. This situation has resulted in conflict between herders and farmers in the country. Northern Nigeria has an extended dry season from October to May and a short period of rain from June to September, and the area is arid. The Nigeria Meteorological Agency reported that for four decades, the North has been adversely hit by regular shortfalls of rainfall, which has reduced to about 150 days. This has turned over 350 sq. /km of land into desert, and 50-75% of the Northwest and Northeast land is turning into desert. The challenge of desertification has caused untold hardship to the area's inhabitants, forcing them to migrate to the South in search of fertile land. This has resulted in conflict between migrating farmers from the North and local farmers from Southern Nigeria.²² Ismail and Kazibwe note that there is consensus among scholars that desertification is the primary driver of the dispute.²³ The Benue Valley is a pull to Sahel regions experiencing desertification. Desertification threatens the livelihood of the people by causing water scarcity, reduced soil fertility, loss of forest and biodiversity, ultimately leading to a shortage of these essential resources. Scarcity as a cause of violent conflict is ancient. Adam Smith posited long ago that land is the principal wealth of every nation. Smith further argued that people invest in land, hoping for high returns. Otherwise, they would be forced to move or reallocate to new places for better returns.²⁴

Due to the loss of forest in Mali, Niger, Cameroon, and parts of Northern Nigeria, pastoralists are forced to migrate to areas that have retained their forest cover. This was how the Benue Valley became the centre of attraction. Thomas Malthus argued in 1798 that there is a relationship between scarcity and conflict. Yanagisawa David notes that Neo-Malthusianism often stresses the causal connection between the shortage of environmental and renewable resources and conflict, confirming empirical findings. He maintains that land degradation in Gikongoro, Southwest Rwanda, led to massive migration to Eastern Island.²⁵ Scholars disagree on the role of desertification in conflict in Africa. Some evidence needs to be examined on the continent.

As a result of the drought of the 1970s and 1980s, many Tuareg were forced to move to Libya and Algeria, and the migrants became radicalized by Gaddafi's ideology. Many who came to Libya joined the Libyan army and gained warfare experience. The main uprising in 1970 was started by the Tuareg groups who migrated to Libya. The drought led to Mali receiving substantial international aid from around the globe. However, the aid intended for Northern Mali, which was devastated by the drought, was reportedly embezzled by corrupt government officials. The information about the embezzlement of their property later further fuelled the anger of the Tuareg at the Malian government.²⁶ Benjaminsen notes that the primary cause of the Tuareg war was the Malian government's modernization policy, which led to the marginalization of the Tuareg

pastoralists in Northern Mali. The new government policy saw pastoralism as anachronistic and unproductive and devised a new policy emphasising farming. The Tuareg, who are primarily herders, saw the policy as anti-Tuareg.²⁷ Carson W. Maconga maintains that in Mali, the Tuareg groups and other Arabs in the North already had no trust in the government before the drought of the 1970s-1980s, and so the drought came to exacerbate their fear. "When people in Saharan Africa who already had low trust in government and a high level of political discrimination experience a severe drought, they increase their support for political violence."²⁸

Drought led to a scarcity of resources like water, farmland, and grazing land, threatening people's livelihoods. The result of the environmental change occasioned by drought is poverty, which will make people more willing to defend their political rights and limited resources. Drought puts pressure on resources; thus, people are more willing to protect their limited resources.²⁹ Clionadh Raleigh notes that groups' political Vulnerability can exacerbate climate conflict. In Sub-Saharan Africa, the risk of conflict largely depends on ethnic groups' political relevance. Environmental matters can be a catalyst for conflict in politically deprived groups. Climate change makes environmental conflict inevitable since it can change the political stability of low-income people.³⁰ Schwartz and Randall argue that the conflicts in Mali, Darfur, and Somalia exemplify how political deprivation can exacerbate environmental disputes.³¹

In 2007, the Secretary General of the United Nations, Ban-Ki-moon, described the Darfur war as the first climate change conflict.³² Carbot Charlene maintains that "the transformation of the ecological zones and the ongoing land degradation and desertification process were the underlying causes of the violence."³³ Reidulf Molvaer notes that the borders between Kenya, Uganda, and Sudan have been subjected to international tension due to herders crossing the border due to desertification or degraded land. In Darfur, the conflicts between the Bani Hebla pastoralists and the villagers and the Rizegat herders in Northern Darfur have resulted in many deaths. In Sudan, there is conflict among the farmers. Farmers are known to have migrated to more fertile land due to the loss of soil fertility. The competition between village farmers and modern mechanised farmers has led to conflicts in Sudan.³⁴ People adversely affected by desertification migrate to areas unaffected and compete for resources in the area they migrated to. Desertification-related conflicts are mainly driven by competition for forage, land, and water. In Africa, desertification, due to the rise and expansion of aridity, has led to migration towards the South in search of resources. The result is a conflict between the migrating and local groups.³⁵ Desertification has created conflicts between herders and farmers, as well as among pastoralists. In Somalia, the inability of herders to move over vast areas like before independence led to the overgrazing of Somalia's land. The result is desertification, famine, and drought. The environmental change increased competition for land and water, which invariably intensified conflicts among the pastoralists. Molvaer notes that adverse environmental conditions in Northern Somalia made many Ishaq migrate to Ogaden, and this led to extended violence and conflict between the groups. He further affirms that ecological degradation was also a factor that gave rise to the tension

between Ethiopia and Somalia and the subsequent war of 1977-1978.³⁶ Clionadh Raleigh argues that environmental conflict is inevitable because the risk of environmental stress is unequally distributed. There is always the politics of equal distribution of the adverse conditions of climate change.³⁷

Cameroon is included in human insecurity and conflicts occasioned by desertification. Stanley Ehiane and Phitani Moyo note that northwest Cameroon has witnessed conflict driven by desertification and climate change. The herder-farmer conflict in Northwest Cameroon has intensified in places like Bamunka, Ndawara, Sabongari, Esu, Wum, and Sagba communities. These conflicts have often degenerated into the destruction of lives and property.³⁸ Valentine A. Teller et al. argue that the conflicts affected the well-being of the cow and reduced milk production, which has caused pastoralists to lose income. The conflict had a significant impact on the farmers' children's education, as parents were unwilling to send them to school under insecure conditions. The farmers' means of livelihood are also affected adversely.³⁹ The conflicts created an atmosphere of fear about what was happening and what could happen.

Impact of the Conflict on Africa

One significant effect of climate change is desertification, and Africa is highly vulnerable to it. Desertification is a significant stressor to the environment and all its inhabitants, posing a risk that has led to conflicts on the continent. The fact that African conflict results from volatile environmental conditions occasioned by climate change, such as desertification and drought, cannot be denied. However, Hayatudeen Muhammed Adam et al. argue that:

*Drought and other environmental problems cannot be directly explained. The 1986 disaster that hit 13 African countries, since ten of these Thirteen countries affected have experienced other problems, such as war, civil strife, destabilization, and a massive influx of refugees.*⁴⁰

Over the last five decades, African states have been experiencing conflicts directly or indirectly due to the impact of desertification. Desertification has led to a scarcity of arable land, water, and natural resources. It has also led to the migration of people from areas affected to areas not affected, which results in conflict between migrating groups and Aborigines. The disputes range from secession, like the Tuareg separatists in Mali, to civil war, like the war in Darfur.

Desertification has affected the sharing of land resources between farmers and pastoralists in Africa. In North Africa, Niger, Mali, and Chad are among the poorest, and violent conflict has aggravated poverty in these states. In Mali, the resources that would have been used to make life better for the citizens are used to prosecute the Tuareg war. Salih notes that the situation in the Ethiopia, Somali, and Ogaden regions is almost collapsing. The condition here is a disturbance of all kinds, threatening peace and security.⁴¹ Bakut Tswat argues that "when there is direct violence (physical and

psychological violence), structural violence (deliberate policies and structures that cause human suffering, death and harm), or cultural violence (practice of cultural norms that create discrimination, injustice and human suffering), there is a threat to security".⁴² Ecological damage can destroy the interests of the state, community, and individual, resulting in "the pursuit of policies that will give them an advantage over the other."⁴³ Desertification has affected about 45% of the land mass in Africa, and this is a significant cause of armed conflict on the continent. It has caused instability, starvation, poverty, and social breakdown in Mali, Somalia, Niger, and recently in Darfur. The decreasing availability of land has resulted in a battle between pastoralists and farmers in the Darfur region of Sudan. CBN Ogbogbo notes that instability has become an attribute of Africa, making the continent the number one producer of refugees globally.⁴⁴

Desertification has led to herder migration from the Sahel, which has led to conflict between farmers and herders. The competition for scarce resources has promoted this conflict. Nsemba Edward notes that as of 2018, the conflict between farmers and pastoralists has led to the death of about 4000. The destruction of farms and livestock cannot be quantified. Desertification intensifies the competition for scarce resources for survival.⁴⁵ The state of Benue in Nigeria has recorded the gravest incidence of herder-farmer conflict and casualties. In Ethiopia, Kenya, and Somalia, the impact of desertification has resulted in conflict, and the conflict has led to over "12.8 million people suffering from food insecurity, vulnerability to disease outbreak, clandestine conflict, and the emergence of religious extremist groups undermining and ransacking the state's authority".⁴⁶

In dry pastoral areas in Africa, especially in East Africa, the conflict in Angola and Ethiopia is marked by destruction. Darkoh reveals that the various disputes have diverted the resources and human power that would have been used for developmental purposes. The conflict also prevented herders and farmers from applying their local knowledge and technology, which hindered their ability to support the community. The conflict has a way of destroying the environment more; conflict displaces people, and the people are primarily settled in refugee camps, where they put severe pressure on the environment.⁴⁷

The United Nations High Commissioner for Refugees reveals that sub-Saharan Africa hosts more than 26 per cent of global refugees. The refugee situation has continued to increase due to the ongoing conflict in the region. The UNHCR maintains that environmental disasters, among other factors like civil unrest, conflict, and oppressive government, are the cause of the refugees.⁴⁸ The African states with the highest number of refugees are Ethiopia (659000), Kenya (551000), Chad (453000), Uganda (386000), Cameroon (264000), and South Sudan (248000).⁴⁹ The refugees put pressure on the environment by cutting trees to erect makeshift buildings, which amounts to deforestation, a factor in the cause of desertification.

Conclusion

This study highlighted the relationship between desertification and conflict in Africa. The paper finds that desertification leads to a scarcity of livelihood and competition for scarce resources like arable land, water, and forests, leading to conflicts. It also leads to migration from environmentally devastated areas to unaffected ones, which in turn causes conflict between the migrating groups and the villagers or aboriginals. Ikpanor ascertains that herders from Chad, Niger, and Cameroun migrate to the Benue Valley due to ecological challenges faced by the foreign pastoralists.⁵⁰

The paper identifies desertification as a factor in the cause of the Tuareg conflict in Mali, the herder-farmer strife in Nigeria, the Ogaden war in Ethiopia, the Darfur war in South Sudan, the Rwanda conflict, and the Somalia conflict. Desertification leads to a scarcity of resources like water, farmland, and grazing land, and the result is a threat to the people's means of livelihood. The environmental damage created poverty, which in turn led to frustration, making people more willing to defend their political rights. The Tuareg war in Mali is a case in point.

The conflict stemming from ecological devastation destroyed land, properties, and agricultural produce. The funds that would have been used for development are used for the prosecution of the war. The conflict has created refugees, which puts pressure on the environment by deforesting forests to erect makeshift shelters. Environmental conflict is a result of competition for scarce resources. The conflict results in desperation to survive. In proffering a solution, one must look at what is responsible for the people's frustration. Since the people are party to their frustration by deforestation, overgrazing, and improper agricultural practices like continuous cropping, the African state government should create a ranch where grazing can be regulated. African local farmers should be sensitized to the damage caused by improper farm practices. Shifting cultivation should be made a policy to save land from devastation. Ikpanor notes that if the government established grazing reserves in the states, pastoralists would be encouraged to remain in their region, which would help prevent encroachment on farmlands.⁵¹ Adeshina Omotayo maintains that the taungya system of farming, which combines crop and tree cultivation, "will ensure that while the land is following, sufficient trees remain to facilitate soil recuperation".⁵²

John T. Rourke maintains that "we live in an era of almost incomprehensible boom."⁵³ The technology is not without a price. Technological advancements have been linked to ozone depletion, changes in rainfall patterns, and global warming. The Montreal Protocol on the Depletion of the Ozone Layer, signed in 1987, should be strengthened—the protocol called for the phase-out of chlorofluorocarbons (CFCs).⁵⁴ Solar-driven power should be encouraged since it is eco-friendly.

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- ⁵⁴Hilary F. French, "Forging a New Partnership to Save the Earth", in John Rourke (ed.), *Taking sides: Clashing Views on Controversial Issues in World Politics*, (Connecticut: Dushkin Publishing, 1996), 181