Small Arms and Light Weapons Proliferation, Nutritional Crisis and Developmental Implications in Nigeria

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Abstract

Armed conflict, whether civil wars, international warfare, or regional instability, has farreaching consequences on societies, particularly on the health and nutritional well-being of populations. The destruction of infrastructure, forced displacement, and disruption of food systems contribute to a severe rise in malnutrition and nutritional disorders. The study adopted a two-pronged approach using narratives, interviews and internet materials. Multi-stage sampling was employed in selecting three recognised geo-political regions out of six. Out of the six (6) geo-political zones in Nigeria namely; North East, North West, North Central, South East, South West and South South, two conflict-ridden states will be purposively selected from the North East (Borno and Bauchi), North Central (Plateau and Benue) and South East (Anambra and Enugu). The selected states have experienced series of small arms conflict ranging from Boko haram in the North East, Fulani Herdsmen clash in the North Central and IPOB and unknown gun men in the South East. Three local government areas (LGAs) from each states were selected totalling nine (9) for the study. Three communities from each LGAs were selected through simple random sampling technique making a total of 27 villages. A total of 384 copies of questionnaire was used in the study alongside interview. Chi-square was used to test for the impact of small arms conflict on food availability in conflict prone areas in Nigeria. The result produces Pearson Chi-Square value of 236.102^a, degree of freedom (df) of 12 and a P-value (2-sided) of 0.000. From the result, since the P-value is less than 0.05 (significance level), the null hypothesis is rejected and can therefore be concluded that there is significant impact of small arms conflict on the food availability in the study area. It was revealed that small arm conflict causes breakdown of food distribution networks and in most cases, roads are blocked, transportation routes are unsafe, and markets are disrupted. These barriers prevent the efficient movement of food and contribute to localized shortages. The vulnerable people are not necessarily dead from the bullet triggered from riffles, rather by the bullet fired by hunger. It was concluded that these effects are not only immediate but can persist for years, affecting future generations. Hence, Investment on local disarmament, expanding food production and embracing an ideal governance is needful.

Keywords: Small Arms and Light Weapons Proliferation, Nutritional Crisis, Developmental Implications, Nigeria

1.1 Introduction

Small arms and light weapon prevalence in Nigeria is considered a serious problem affecting the nutritional status of modern society. The outbreak of political violence, ethno-religious crisis, rise in cultism and touting culminate to the mass circulation of weapons at the disposal of civilians. Studies have shown that the use of small arms and light weapons unwisely has affected socio-economic activities with specific focus on food production, processing, marketing and supply (World Food Programme (WFP) (2020). Goal sixteen (16) emphasizes the need for promoting peacebuilding and conflict prevention in order to strengthen development.

The Intersection of Short arms and nutritional status presents a complex issue for sustainable development. World Food Programme (WFP), recognizes conflicts as a primary driver of acute food insecurity, with millions of children facing malnutrition in war-torn regions (WFP, 2020). According to Small Arms Survey (2018), proliferation of small arms facilitates violence and discourage agricultural investment. Where the violence turns to full blown civil wars, food availability and supply can be sabotaged thereby affecting vulnerable populations like children and pregnant women. Some conflict can burn down farmlands and hinders humanitarian access. A recent study by Food Security Information Network (FSIN) has linked famine with the war conflict and the rate of mortality from hunger-related causes (Food Security Information Network, 2018)

Looking at small armed conflicts at regional setting, the Horn of Africa and the Sahel have had serious cases of population displacement, burden on relief materials in refugee camps and stress in agro-sector. According to a report by United Nation Refugee Agency (UNHCR), over 26 million people are currently displaced in Africa due to conflict, resulting in increased vulnerability to hunger and malnutrition (UNHCR, 2023). Displacement not only disrupts food production but also limits access to essential services and humanitarian aid.

Religious conflict and political instability are major causes of human displacement and food crisis as out of the 155 million persons acutely food insecured, 100 million live in conflict-affected countries (FSIN, 2021; Tranchant et al., 2019; FSIN, 2018). For example, protracted conflicts were at the root of six of the 10 worst food crises zone – in the Democratic Republic of the Congo, Yemen, Afghanistan, the Syrian Arab Republic, Nigeria and South Sudan (FSIN, 2021). To show the extent of nutritional damage from conflict situations, some countries such as Burkina Faso, South Sudan and Yemen, that experience free flow of small arms and light weapons are largely food insecured.

Recent report has indicated that the poor nutritional status among Somalian citizens is catastrophic, reaching over 6 million by 2022 (FAO, 2022). Such happening replicates in Nigeria where about 14.4 million people were food insecure as of March 2022. The rate of proliferation of small arms in Nigeria and Africa broadly would have been curtailed except for challenges like the porosity of borders, illegal transaction of light weapons and corruption among security officials (Mulama, 2013). This study explores how conflict leads to nutritional disorders, focusing on the mechanisms through which it impacts food security, the types of nutritional deficiencies observed, and relevant case studies. The discussion will also touch on the long-term consequences of conflict on public health, development and nutrition. Nevertheless, new approaches confronting nutritional imbalances, arm conflict and retarded development in Nigeria.is of necessity.

1.2 Statement of Problem

The menace of small arms and light weapons proliferation does not only contribute to security crisis, rather nutritional and health crisis in African soil (Ocholi & Eze 2018). Small arms and light weapons have come to stay and surprisingly, Africa is considered a major trans-shipment point for the international arms trade (Stohl et al, 2018; Chesterman, 2015). Most of the arms and light weapons are purchased and donated to political tout to disrupt, victimised and suppressed opposition parties. At the end of the election period, the arms are left in the hands of criminals to begin another phase of conflict. It is reported that over 8 million illegal arms are in the hands of terrorist, criminals, ethnic militias, politicians and death squads across Nigeria (Ocholi & Eze 2018)

Small arms and light weapon take its different forms in regions of Nigeria and by extension unleashed its effect on health and nutritional status. For instance, the escalating effect of Boko Haram insurgency in the North East truncates food production with its effect peaked in 2014. Around the North Central zone, the use of light weapons among herdsmen disincentivized food producers and distributors. Down in the South South region, the uprising of unknown gun men, militant and IPOB similarly threaten agricultural investment significantly. The fear of stray bullet, sit-at-home threat and other victimisation by angry mob forces many farmers and food dealers to either seek alternative business or relocate to safer places, thus instigating hunger across the entire country.

Hazen and Horner (2017) emphasises that out of 640 million small arms and light weapons (SALW) globally available, about 100 million of such are resident in Africa, 30 million in sub-Sahara Africa and 8 million in West Africa with 80 percent of the weapons found in the hands of civilian. Statistics from Renner (2016), put up death from SALW to about six million. A study by Imobighe (2018) has faulted the porosity of African territorial borders to have been a major cause of small arms transfer and recently over 1,500 illegal entry points were found open between Benin-Niger and the Nigeria's border.

Proliferation of weapons in the custody of civilians and organized criminal groups is the starting point of large scale war. From the submission of Kevin (2017), the availability of these weapons, light up small scale criminal act before it further escalates into civil wars. Before now, much blames were pointed to criminality by Africans as the key rationale for the availability of weapons. On a contrary note, social critics like Green (2011) and Nelson (2015) have fingered the developed countries for illegal transaction of arms in Africa. A typical example is the Rwanda war that crippled the economy in their attempt to meet the conditionality of illegal weapons transactions after the conflict period.

Another case study is the after-effect of political instability in African countries like Mozambique, Angola, Somalia, Liberia, Sudan, and Sierra Leone whereby colonial influence on arms transfer affect economic growth resulted in nutritional problems in war-torn communities. Despite several global initiatives towards controlling the trafficking and proliferation of small arms including United Nations Programme of Action on small arms (UNPOA), African Union (AU), Economic Community of West African States (ECOWAS), Southern African Development Community (SADC) and East African Community (EAC), illicit arms trafficking is rising steadily. It is worthy of mention that international policies aimed at arms control, conflict resolution, and humanitarian aid are often hindered by geopolitical interests and inadequate enforcement. Moreover, the Arms Trade Treaty (ATT), designed to regulate the global arms trade, has been hampered by prioritized interests of powerful countries who are manufacturers and suppliers of arms with little regard to humanitarian concerns.

This study becomes necessary in contemporary security and development research due to the upsurge in corruption in Nigeria and Sub-Saharan Africa and the attempts by the citizen to spark up political revolution. The study suggests that investment in nutritional need of crisis regions be considered paramount by development agencies and government. The study was guided by the following research objectives to:

- 1) Analyse the spatial distribution of conflict areas in Nigeria
- 2) Assess the nutritional conditions of households in conflict-prone areas of Nigeria.
- 3) Assess the effect of small arms and light weapon prevalence on food availability and prices in populace in Nigeria
- 4) Assess the effect of small arms violence on community development in the study area

1.3 Research Hypothesis

H0: There is no significant impact of small arms conflict on food availability in the study area

2.1 Literature Review

2.1.1 Small arms and light weapons effect on food production

Small arms, as officially defined by the United Nations are weapons that can be carried by an individual. They are the leading cause of death in contemporary times and are more common in conflict zones globally. Due to their easy mobility, operability and availability, they are commonly used by the youth and adult. Utilization of small arms led to the collapse of social structures that support health and nutrition. Globally, over 1 billion of small arms are in circulation and the effect of its utility is unquantifiable (The UN Small Arms Survey, 2018). Light weapons are in the custody of many including public office holder for self defence and political suppression, organized cult group, arm robbers and herders. In Kenya, for instance, studies by Tirthankar (2022) admitted the use of small arms among the Maasai pastoralists and the resultant effect on food production. Handling of small arms by herders is common in West and Central Africa specifically Nigeria, central Mali, and northern Burkina Faso.

In the Sahel region for example, small arms conflicts have led to fatalities with a typical example of Nigeria where approximately 6500 people have reportedly been killed due to 850 clashes that took place from 2010 through 2015 (Tade and Yikwabs, 2020). Following the ruin of agrarian communities, recently, farmers in some conflict-torn regions have purchased guns for suppression of their enemies. For instance, Dagon farmers in Mali are reported to have invaded one of the Fulani pastoralists' villages and killed 175 of them in the year 2019 alone (Benjaminsen and Ba, 2021).

The North Central region of Nigeria, has been a hotspot for small arms and light weapons confrontation especially during herder-farmer clashes for decades and these conflicts has been fueled by competition for scarce land resources and traditional practices, posing a significant threat to the state's food security (Udeh, 2018; Nomor and Ominyi, 2021, Erunke and Aku 2022). In Benue state virtually all the ethnic groups (the Tiv, the Agatu people of Idoma and the Igede) have been under attack. The herdsmen-farmers conflict has inflicted havoc on fourteen of Benue's 23 local governments, including Guma, Gwer-West, Gwer-East, Agatu, Ado, Ogbadibo, Ohimini, Katsina-Ala, Logo, Kwande, Ukum, Tarka, Buruku, and the northern part of Makurdi (Apenda, 2016).

In a study by Gundu (2017), losses to the country as a result of herdsmen activities since 2001 have been estimated at over \$14 billion. Between 2013 and 2017, herdsmen killed close

to 2000 people in Tiv communities of Benue State, and over 755,538 persons internally displaced. The Tiv community have greatly lost farm produce and other valuables worth over N39,823,798,469 (Idyorough, 2017). In the Idoma and Igede communities, over 1600 lives were lost and properties value over N6, 232.421, 669 destroyed.

Armed conflict has slow down economic development according to Gema (2018) who examined the phenomenon of farmers – herders' conflict and the extent to which it has affected the development of Benue state. His findings showed that farmers -herders' violent conflict affected the level of employment opportunities in Benue State. Some crop farmers have been rendered jobless because they could not access their farmlands. The local traders have lost their goods in market during attacks therefore could not have access to capital to continue with their trade again. In fact, informal sector is crippled due to attack by the herdsmen.

Similar findings have been observed by Mbah, Jiriko, and Amah (2020), showcasing how socio-economic activities have been truncated in agrarian communities in Benue State. Studies by Alao et al (2019); Onwunyi and Anekwe (2020); Kwaghtser (2019) had all admitted the displacement of people and occupation and disruption of farming in Benue State. Musa, Salami & Umoru (2019) reported that farmers in Nassarawa have lost their crop yield due to small arms conflict between herders and farmers taking inventory between 2015 and 2020.

2.1.1 What actually fuel small arms conflict

Scholars have made inquiry, seeking to understand what actually fueled armed conflict. It can be justified that small armed conflict is facilitated by various routes; including weak governance, lack of regulation, and international arms trade. According to the Small Arms Survey (2018), approximately 75% of all armed violence globally is associated with small arms, underscoring their role in civil conflicts. Countries like Somalia, Lebanon, Kuwait, Syria, Yemen, and the Democratic Republic of the Congo (DRC) exemplify the devastating effects of small arms proliferation.

In some conflict zones, social gatherings are littered with guns and to worsen the situation, students and teachers are found carrying gun to schools for self-defence and such tendencies breed social chaos.

Somalia which has faced decades of civil war has an influx of small arms into her region and this has heightened and introduced another phase of violence and prolonged instability. As noted by the UN Development Programme (UNDP, 2019), the presence of arms has contributed to a humanitarian crisis, with over 2.6 million people displaced and millions facing food insecurity. UNICEF (2021) reports that malnutrition rates in Somalia are among the highest globally, with approximately 1.5 million under five children projected to be acutely malnourished.

In the case of Yemen civil war, which escalated in 2015, the world witness one of most cost demanding humanitarian services. The conflict fueled by the availability of small arms totally crippled the economy and downsized the agricultural sector. Following this, around 16 million people in Yemen are food insecure, with 2.3 million children suffering from acute malnutrition (Integrated Food Security Phase Classification, 2021; UNICEF, 2020). In several regions of Yemen, cumulative effect of arm has created a long-term developmental issues for children and teens.

The presence and abundance of natural resource and armed conflict tendencies in Africa is another area of concern. Almost all the natural resource rich countries in Sub-saharan Africa have witnessed one form of conflict and the other. In the Democratic Republic of the Congo

(DRC), the presence of various armed groups particularly in eastern regions that is blessed with abundant natural resources. The conflict has triggered widespread displacement and emergency humanitarian attention. Report from World Health Organization admitted that malnutrition affects over 4 million children in the region (WHO, 2020). Another report from International Rescue Committee (2018), recognizes small arms to have led to the deaths of an estimated 5.4 million people.

2.1.3 Consequences of small arm conflict

The most immediate and widespread consequence of small arm conflict is the disruption of food systems. Conflict at whatever scale leads to the destruction of agricultural production, limits access to markets, and obstructs food distribution. These factors cause food insecurity, which, in turn, increases the risk of malnutrition. Food security, as defined by the Food and Agriculture Organization (FAO), refers to a situation where "all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food." Conflict undermines all dimensions of food security.

In conflict zones, the agricultural sector often becomes a primary target for military action. Crop fields are destroyed, livestock farms are destroyed and in most cases abandoned, and irrigation systems are damaged. In many cases, agricultural workers are either killed, conscripted, or displaced, making it impossible to maintain production levels. For instance, during the Syrian Civil War (since 2011), agricultural output plummeted, with estimates suggesting a 70% reduction in Syria's crop production by 2016 (World Food Programme, 2016). The consequences were devastating on food supply chain and this led to rising prices, exacerbating food insecurity and malnutrition. In addition, the destruction of infrastructure and the occupation of key agricultural areas in countries like South Sudan has had similar effects on food supply chains.

According to the World Food Programme (2016), 70% of Syrians were food insecure by 2016, with over 6 million people requiring urgent food assistance. Among the most affected were children, who suffered from high rates of malnutrition. The conflict in Yemen, which began in 2015, has precipitated one of the most severe nutritional crises in the world. As of 2020, 80% of Yemen's population required humanitarian aid, and more than 2 million children were suffering from acute malnutrition (UNICEF, 2020). The blockade on Yemeni ports and the destruction of infrastructure have severely hindered the importation of food, resulting in skyrocketing prices and widespread shortages.

Small arms conflict is associated with displacement and restricted access to food. The mass displacement of people due to conflict further aggravates food insecurity. Refugees and internally displaced persons (IDPs) often find themselves in areas where food is scarce or unaffordable. In the case of the Yemeni conflict, displacement and the closure of key ports have significantly hindered the importation of food, causing the price of essential items to skyrocket. A report from the United Nations (UNHCR, 2020) noted that approximately 80% of Yemen's population required humanitarian aid, with millions struggling to meet basic nutritional needs due to food insecurity.

It can further be added that conflict trigger breakdown of food distribution networks. For instance, even when food is available, its distribution is often hindered by conflict. Roads are blocked, transportation routes are unsafe, and markets are disrupted. These barriers prevent the efficient movement of food and contribute to localized shortages. In the case of Sudan's Darfur conflict, food distribution was frequently impeded by attacks on aid convoys, and the

government's inability to ensure safety for humanitarian workers led to high hunger-related mortality (Fitzpatrick et al., 2018). The result is often a significant spike in food prices, which makes it difficult for impoverished families to purchase sufficient quantities of nutritious food. Conflict-related food insecurity and malnutrition can lead to a variety of nutritional disorders, which are often most severe among vulnerable populations such as children, pregnant women, and the elderly. These disorders can have long-term effects on individuals' health, cognitive development, and overall well-being.

One of the most significant consequences of conflict-induced food insecurity is undernutrition, particularly stunting in children. Stunting is defined as low height for age and is a key indicator of chronic malnutrition. Conflict zones typically exhibit high rates of stunting because of limited access to food, inadequate maternal nutrition, and a lack of healthcare services. In South Sudan, a 2015 survey found that nearly 37% of children under five years of age were stunted (Suda, 2017). These children are at a higher risk of cognitive impairments, lower educational attainment, and increased susceptibility to diseases.

Conflict can lead to wasting which can increase vulnerability to infections, as it weakens the immune system. In Yemen, the ongoing conflict has led to an alarming increase in acute malnutrition rates, particularly in children. A 2019 report from UNICEF indicated that more than 2 million children in Yemen were acutely malnourished, with many suffering from severe wasting (UNICEF, 2019).

Conflict-induced food insecurity can lead to deficiencies in essential vitamins and minerals, such as iron, vitamin A, and iodine. These deficiencies are particularly harmful during critical periods of growth and development, especially for pregnant women and children. In conflict zones like Ukraine, Syria, Palestine and other countries in Middle East where food supply chains have been severely disrupted, the prevalence of iron deficiency anemia among young children has risen significantly. A study by Abu Raddad et al. (2015) revealed that 50% of Syrian children under five were affected by anemia, largely due to inadequate access to iron-rich foods and supplements.

While undernutrition is the most visible consequence of conflict and it occurs when people, particularly in urban areas, have access to cheap, calorie-dense, but nutritionally poor food options. In displaced populations, access to processed foods like instant noodles, sugary snacks, and soft drinks can lead to an increase in caloric intake without adequate nutritional quality. In countries like Sudan and Iraq, some urban populations affected by conflict have reported increased obesity rates due to reliance on such foods, which are cheap and available in conflict-affected areas (Fitzpatrick et al., 2018). Since the end of World War II in 1945, there have been numerous conflicts across the globe, including wars, civil wars, and other forms of armed confrontations. According to Uppsala Conflict Data Program, since WWII, there have been over 350 distinct conflicts. This includes both major wars and smaller, low-intensity conflicts (UCDP, 2023). Between the second war and the Cold War-era Conflicts (1947-1991), over 100 conflicts have been reported including the Korean War (1950-1953), the Vietnam War (1955-1975), and the Afghanistan War (1979-1989).

On the other hand, most of the post-cold war conflicts (1991-present) have shifted focus from full scale war to ethno-religious crisis beside the Rwandan Genocide (1994), Yugoslav Wars (1991-2001) Syrian Civil War (2011-present), and the War in Yemen (2014-present). Another key area of interest on conflict-related nutritional problems include scenarios happening in countries like Ukraine, Palestine, Iraq, Syria, and Lebanon. Ukraine has faced significant

nutritional challenges in recent years due to the ongoing war with Russia, which began in 2014 and escalated in 2022.

A report from the World Food Programme (WFP) in 2022 indicated that the conflict has led to widespread food insecurity, with millions of Ukrainians unable to meet their daily food needs. This is a result of infrastructure destruction, displacement, and a shrinking economy. Ukraine has a high prevalence of micronutrient deficiencies, including iron, vitamin D, and folate. Malnutrition among children and pregnant women has been a longstanding issue, but the war has worsened these conditions.

Still in the middle east region, the ongoing Israeli-Palestinian conflict, economic blockades, and restricted access to resources have had serious implications for nutrition in Palestine, particularly in Gaza. According to a recent report, the poverty rate in Palestine is high, with more than 30% of the population living below the poverty line. Food insecurity affects over 50% of the population, especially in Gaza, where the blockade has limited access to both food and medical supplies. Among children, stunting and wasting rates are serious cases, besides 8% of under five children suffering from wasting and 15% from stunting in Gaza (FAO, 2020). In Iraq, the nutritional situation is shaped by years of conflict, political instability, and economic difficulties, particularly in the aftermath of the Iraq War (2003) and the ISIS insurgency (2014).

The World Bank reported that food insecurity in Iraq affects about 23% of the population, with displaced families facing the highest rates of malnutrition and micronutrient deficiencies. In addition to undernutrition, Iraq is also facing rising rates of obesity and diet-related chronic diseases, especially in urban areas. This dual burden of malnutrition is a growing public health concern (World Bank, 2020). A close examination of the Syrian Civil War, which began in 2011, is characterized by widespread displacement, destruction of infrastructure, and nutritional instability. From a report released by the United Nations Office for the Coordination of Humanitarian Affairs, over 12 million people in Syria face food insecurity, and more than 3 million children suffer from malnutrition. The war has also disrupted agricultural production and food supply chains (OCHA, 2023).

Nutritional problems in Lebanon is multidimensional in the sense that while the country has been grappling with a severe economic crisis since 2019, the mass entry of Syrian refuge, the devaluation of Lebanese currency and the 2020 Beirut port explosion compounded the situation. These issues have worsened food insecurity and nutrition across the country. A 2023 report from the World Food Programme indicated that more than 70% of the Lebanese population is now facing nutritional crisis, with food insecurity affecting more than 50% of households.

Displacement due to conflict places enormous stress on refugees and internally displaced persons (IDPs), who often live in overcrowded conditions struggling to eat any available food. These populations typically face limited access to food, water, and healthcare. Even in refugee camps, where humanitarian aid is provided, food rations may not meet the nutritional needs of the population, leading to deficiencies in vitamins and minerals. The United Nations High Commissioner for Refugees (UNHCR) reported that malnutrition rates in refugee camps in South Sudan, for example, often exceed emergency thresholds, contributing to higher rates of infant mortality and stunting (UNHCR, 2021).

Conflict-induced trauma can disrupt eating behaviors, particularly among children and mothers. Chronic stress and mental health challenges, including post-traumatic stress disorder (PTSD), anxiety, and depression, can diminish appetite and interfere with the ability to

maintain adequate nutrition. For mothers, mental health problems can impact infant feeding practices, reducing the likelihood of breastfeeding or the introduction of complementary foods. Such disruptions to child nutrition exacerbate the already heightened risk of stunting and other forms of malnutrition (Doherty et al., 2017).

Yemen provides a stark example of how protracted conflict can lead to widespread nutritional disorders. The ongoing civil war, which began in 2014, has resulted in a severe humanitarian crisis. As of 2020, it was estimated that 80% of Yemen's population required humanitarian assistance, with 2.3 million children suffering from acute malnutrition (Save the Children, 2020). The war has devastated the country's agricultural sector, and the blockade imposed by the Saudi-led coalition has further restricted access to food and medical supplies. The results have been catastrophic: stunting and wasting rates have reached levels far beyond emergency thresholds, and more than half of all children under five are chronically malnourished. In response, international organizations like the World Food Programme (WFP) have been providing emergency food assistance, but the scope of the crisis far exceeds available resources.

The Syrian Civil War, which began in 2011, has resulted in widespread food insecurity and malnutrition. Over 12 million people have been displaced, and many areas have seen their food production systems decimated by bombing and blockade tactics. In 2016, the Syrian Arab Red Crescent reported that 5.5 million Syrians were in need of food assistance. Child malnutrition has worsened, with the prevalence of stunting rising among displaced populations. International organizations have responded with emergency nutrition interventions, including the distribution of fortified foods and micronutrient powders. However, ongoing conflict and the difficulty in accessing besieged areas have limited the effectiveness of these efforts (UNHCR, 2021).

2.1.4 Why resource-rich African state should give human nutrition priority

Africa is globally recognised as the natural resource base, blessed with diverse solid minerals, forest products apart from oil and gas. Exploitation of these resources is associated with conflict which breed nutritional problems. As long as natural resource exploitation is involved, there is bound to be nutritional crisis and the wake of new armed groups. Table below show the countries in Africa, the resources exploited and nature of conflict.

Table 2.1: Resources Conflict

Country	Major	Nature of Conflict
	Natural	
	Resources	
		North Africa
Algeria	Oil, natural gas, water, arable land	The insurgency by groups like Al-Qaeda in the Islamic Maghreb (AQIM) has been partly motivated by the desire to control energy-rich areas. Desertification and grievances from the Berber and other part of the south Algeria which is rich in oil and gas, but underdeveloped.
Egypt	Nile water, oil, gas, arable land Resource	The construction of the Grand Ethiopian Renaissance Dam (GERD) in Ethiopia has sparked tensions with Egypt over potential reductions in water flow, threatening Egypt's agricultural sector and drinking water supply.

Libya	Oil, land and gas	The competition for resources exacerbates regional divisions, with the east (Cyrenaica) and the west (Tripolitania) having different interests and access to resources.
Morocco	Oil and gas, phosphate, land and water	The status of Western Sahara remains a contentious issue, with Morocco asserting control over the region, which is rich in phosphates and other resources, despite opposition from the indigenous Sahrawi population and neighboring Algeria.
Tunisia	Phosphate, oil, water, arable land	Tunisia is a major producer of phosphate, which is vital for its economy. However, competition over land and environmental concerns related to phosphate extraction have led to social unrest.
Western Sahara (Disputed Territory)	Phosphate, fisheries, water	Western Sahara is rich in phosphate reserves and has a productive fishing zone and water. Morocco's occupation of the region has led to resource extraction, which is contested by the indigenous Sahrawi
Territory)		people and the Polisario Front, a liberation movement. Southern Africa
Zimbabwe	Diamonds, platinum, gold, land	Conflict over land redistribution and control over mineral resources, exacerbating political and economic tensions
Mozambique	Timber, aluminium, coal	Civil war (1977-1992) fueled by control over natural resources like timber and minerals.
Botswana	Diamond and water	Struggle over resource control and wide gap between the rich and the poor. Protests were sparked over issues of land rights, environmental degradation, and the distribution of mining wealth.
Eswantini	Land	Eswatini faces tensions over land ownership, especially in rural areas. The king's control over land and the centralization of power create a system where local populations have limited control over resources, leading to dissatisfaction and calls for reform.
Lesotho	Water	Political instability and corruption have often exacerbated resource conflicts, with elites taking advantage of water wealth for personal gain
Namibia	Uranium and Diamonds	land redistribution tensions between the government and local populations.
South Africa	Land, water, gold, platinum, coal, water	South Africa also faces challenges regarding water availability, especially in its dry areas. Competition for water between agriculture, mining, and urban areas has created tensions.
Mauritius	Water, land	Political tension
Malawi	Water, land	Overpopulation leads to herders-farmers' clashes. Also, Conflicts over access to water, particularly along the borders with Mozambique and Tanzania, have occasionally flared conflict
Zambia	- Copper	Political tensions from failed leadership

		East Africa
Comoros	Land water, marine lifeform, limestone and salt	Struggle for resource control and external interest over maritime resources especially France and China
Djibouti	Land, water, fishing	Located between Red sea and gulf of Aden opens access to world shipping routes, the clash of interest over port and infrastructure development, water struggle, global military presence and fishing from neighbours including Yemen and Somalia.
Eritea	Land, water, water, gold, copper	A blend of territorial dispute with Ethiopia leading to a civil war in 1998-2000, limited resource and fight over water control, struggle to control the western and northern Eritea rich in gold, copper and zinc
Kenya	Land, water	Thave been increasing instances of land grabs, where powerful individuals take over land that is meant for public use. Struggle for water in the dry northeastern regions, where pastoralist communities compete for access to water.
Tanzania	Land, water	The problem of land, water and the construction of dams and large- scale agricultural projects in water-rich areas has led to tensions between agricultural communities and conservationists
Seychelles	Water, nature park and fisheries	Political tension due to public policy
Somalia	Pastoral land, oil (potential)	Competition over land and natural resources, particularly water and grazing areas, has fueled long-standing conflicts
Ethiopia	Gold, tantalum, oil, land	Conflicts over resource control, especially in regions like Ogaden, and tensions over access to water resources (Nile), river Omo, Awash, and Dam on Blue Nile
Rwanda	Tin, tungsten, coltan	The exploitation of mineral resources has fueled conflict, particularly in the Great Lakes region.
Uganda	Oil, solid minerals	Oil resources, particularly in the Albertine Rift region, have caused tensions both within the country and with neighboring countries
South Sudan	Oil, gold	Disputes over oil-rich regions (e.g., Abyei), leading to civil war and secession of South Sudan. The conflict between different ethnic groups, notably the Dinka and Nuer, has been exacerbated by the struggle for control of oil fields.
Madagascar	land, fisheries, and timber, nickel,	Political crisis over sharing of resource proceeds

	cobalt, gold	
	and graphite	
Burundi	Tin,	Resource-rich areas have fueled conflict between rebel groups and
	tungsten,	the government. Burundi's historical ethnic tensions between the
	tantalum	Hutu and Tutsi have been compounded by competition for land
		West Africa
Sierra Leone	Diamonds,	Civil war (1991-2002) driven by rebel groups seeking control of
Sierra Leone	gold	diamond mines
Nigeria	Oil, gas	Civil war and Militancy in the Niger Delta, where local groups fight
\mathcal{E}	, &	for control over oil wealth and environmental justice
Togo	Phosphate,	Conflicts over phosphate and gold reserves have contributed to
	gold	economic instability and tension.
Liberia	Diamonds,	Civil war (1989-2003) partially funded by the illicit trade of
	timber, iron	diamonds and timber
	ore, timber,	
	rubber, oil	
Burkina	Land, gold,	Resource control over arable and grazing land, in addition to water
Faso	water	scarcity and displacement of the locals from ancestral land by
		foreigners for mining. Jihadist group also hit the region over land
G 1	0.1 11	control
Sudan	Oil, gold	Disputes over oil-rich regions (e.g., Abyei), and gold in Darfur lead
		to tension and civil war and secession of South Sudan apart from
Mauritania	Land, Iron	nomadic herders and sedentary farmers clashes Mauritania faces severe water scarcity, and there are tensions over the
iviauiitaiiia	ore, fish,	sharing of water resources, especially with neighboring countries like
	water, gold	Mali and Algeria.
	water, gold	With the Augeria.
Ghana	Land, gold,	Resource control over arable and grazing land and displacement of
	oil, timber,	the locals from ancestral land by foreigners for mining
	water,	
	bauxite	
Guinea-	Timber,	Struggles over land control, herders-farmer's clash, struggle over
Bissau	fisheries	forest and timber control. Control over potential oil reserve areas as
Carina	C-14	well as the fishing industry.
Guinea	Gold,	Control over bauxite industry, struggle over water, land fishing and
	bauxite, iron	timber is more common
	ore,	
	diamond,	
Senegal	Land, water	Land rights is very serious, farmers-herders' clash around the
Soliogui	and fisheries	Senegal's river valley and Eastern region
Benin	Oil, land,	Struggle over land, timber, fisheries, and water as well as herders-
republic	timber,	farmers' clash
1	water	

Gambia	Land, trans- boundary	Trans-boundary water conflict with Senegal	
	water		
Cape Verde	-	No outstanding conflict, although there are few cases of union protest and demonstration.	
Côte d'Ivoire	Cocoa,	Conflicts (e.g., 2002-2007) driven by resource control and	
(Ivory	diamonds,	competition between political factions.	
Coast)	oil, gold, land, coffee		
Nigeria	Oil, land,	Struggle over control of oil and gas, farmers-herders clash, illegal	
	water,	mining of gold and other minerals in the North, land grabbing in	
	pasture	urban cities, shrinking of water areas	
Niger	Border, land, water, gold	Farmers-herders and competition for water	
Mali	Gold, land,	Rebel groups and jihadist organizations fight for control over	
	water	resource-rich northern regions.	
		Central Africa	
Democratic	Gold,	Armed groups and militias vie for control of mineral-rich areas,	
Republic of	diamonds	leading to prolonged conflict	
Congo	and cobalt		
(DRC)			
Equatorial	Oil	Disputes over oil wealth, with government control consolidating	
Guinea		around oil extraction, has led to instability.	
Gabon	Oil, timber	Tensions over oil wealth and timber resources have contributed to	
		political unrest and challenges in equitable resource distribution.	
		There have been protests over the allocation of oil wealth and calls	
		for greater transparency and reform.	
Congo	Oil, timber,	The central government's inability to manage resource wealth	
Republic	gold,	effectively has fueled public discontent.	
	diamond,		
	copper		
Central	Diamonds,	Armed groups control resource-rich areas, fueling ongoing instability	
African	gold, timber	and violence.	
Republic	0.1		
Chad	Oil	Conflicts over oil revenues and regional instability due to competing	
		interests in the oil sector. Rebel groups in Chad and neighboring	
Comaras	I and weeks	Sudan have sought control over resource-rich areas.	
Cameroon	Land, water,	The concentration of wealth in the capital and failure to share	
	oil and gas,	resources equitably have contributed to local grievances, particularly	
	timber,	in the Anglophone regions.	
	aluminum,		
	cocoa, coffee		
Angola	Oil,	Civil war fueled by competition over resource-rich regions, especially	
Aliguia	diamonds,	diamonds and oil fields.	
	timber	diamonds and on neids.	
	umoei		

Sao Tome	Oil, water	Political crisis over sharing of resource proceeds
and Principe	and land	
Gabon	oil,	Tension over sharing of resource proceeds
	diamonds,	
	and land	

Source: Author compilation, 2024; FAO 2020

This table contain and present countries where natural resources have played a significant role in sparking or fueling conflicts, either by providing funding for armed groups or by exacerbating political and social tensions over wealth accumulation and control. From the Table, out of 55 countries, more than 70% have gone through serious countries conflict across the five (5) regions. Resource conflict connected to oil and gas, diamond, gold, water and land are the major triggers of conflict in Africa. Precisely, resource control has been found to be the primary cause of conflict in the various regions. Every individual and sects strive to annex natural resources and resistance from other groups results in conflict. In Africa generally, more than twenty two (22) full blown civil war has been recorded and Africa as a continent is economically retarded partly due to the huge resources invested in post war rehabilitation and measures to resist further escalation as in the case of South Sudan whereby different phases of conflict are unfolding.

Another point worthy of mention is the case of conflict directly or indirectly linked to land and trans-boundary water. Cross-border conflict is heavily felt in Northern Africa. The reasons could be traced to the cultural ties with the Middle East which are widely known for border conflict for decades. Territorial control over Western Sahara threw the entire region into tumult. Nevertheless, territorial conflict exists in other regions of Africa such as Nigeria-Cameroon over Bakassi peninsula which is rich in oil and gas, Sudan-South Sudan over Abyei and Heglig oil fields, Ethiopia-Eritea over the control of Badme region, Gambia-Senegal over water access/control, Somalia-Kenya-Ethiopia over territorial supremacy, Mali-Algeria, Western Sahara (Morocco-Sahrawi Arab Democratic Republic), Kenya-Somalia over Indian ocean resources, Uganda-Rwanda, Central African Republic and Chad, Congo DR-Uganda-Rwanda-Burundi/Hutu-Tutsi over the control of resources in the Eastern provinces. Moreover, Congo DR has faced multiple territorial conflict owing to its large land mass, surplus natural resources which oftentimes attract internal and external rebels. The Republic of Congo had battled to gain territorial supremacy for many decades and unfortunately, the level of economic development is questionable in spite of being one of the largest reserve of global natural resources.

Each of these armed conflict has distinct effect on food supply chain and nutrition by extension. For instance, South Sudan's civil war (2013–2018) led to widespread displacement and food insecurity, with devastating consequences for the nutritional status of its population. According to the FAO (2020), 60% of South Sudan's population remained food insecure even after the conflict officially ended. A 2017 study found that 30% of children under five years of age were acutely malnourished, and more than one-third were stunted (Suda, 2017). The conflict disrupted agricultural production and trade, making it difficult for families to access sufficient and nutritious food.

In refugee camps and remote areas, food rations are limited, and many children suffer from micronutrient deficiencies, such as iron and vitamin A. Humanitarian efforts have focused on providing nutritional supplements and emergency feeding programs, but access remains a significant challenge due to ongoing insecurity and logistical constraints particularly in North

and Central Africa. Regionally, the resource conflicts in Central Africa are complex and multidimensional, driven by factors such as competition for natural resources, weak governance, corruption, ethnic and political rivalries, and external influences. While many countries in the region are rich in resources, the failure to manage these resources equitably and sustainably has led to instability and conflict. The DRC is one of the richest countries in the world in terms of mineral resources, including cobalt, coltan, gold, and diamonds. These resources have attracted international actors and fueled conflicts, particularly in the eastern part of the country. Local militias, international corporations, and neighboring countries often compete for control of these lucrative resources. Many armed groups in the DRC rely on resources like diamonds, gold, and coltan to fund their operations, leading to further instability.

East Africa also face series of conflict over the years. These conflicts often arise due to competition over scarce resources such as land, water, minerals, and agricultural products, which are exacerbated by ethnic tensions, historical grievances, and weak governance structures. For instance, Ethiopia shares key water resources like the Nile River with neighboring countries. Disputes over the construction of dams, such as the Grand Ethiopian Renaissance Dam (GERD), have sparked tension with Egypt and Sudan. The dam's potential impact on downstream water access is a contentious issue. Ethiopia's federal system has led to disputes between various ethnic groups over land and political power. The Tigray conflict, which began in 2020, also involves competition for resources, particularly in the Tigray region where fertile land and access to infrastructure are key points of tension.

Resource conflict in Southern Africa is a significant issue driven by a variety of factors, including competition for natural resources, political instability, economic disparities, and historical legacies. This region is rich in minerals, fertile land, water resources, and wildlife, which often become points of contention. The legacy of apartheid has created significant disparities in land ownership, with most arable land still in the hands of a small white minority. Efforts to redistribute land have led to tensions, as many black South Africans continue to struggle with land access.

Moreover, in the North African region, conflicts linked to competition over vital resources like water, land, oil, gas, and minerals, as well as broader geopolitical and socio-economic factors are numerous. The discovery of oil and gas in the Mediterranean has led to competition for control of maritime zones, especially with neighboring countries like Cyprus, Israel, and Libya. Libya has some of the largest oil reserves in Africa. Control over oil fields and oil revenues has been a key factor in the civil war since the 2011 NATO intervention. Different factions, including those backed by foreign powers, fight for control of these valuable resources.

Libya is heavily dependent on the Great Man-Made River (GMMR), a large-scale irrigation project drawing water from underground aquifers in the desert. Control over water infrastructure has been a significant point of contention in the civil war. Morocco controls more than 70% of the world's phosphate reserves, a critical resource for fertilizers. This dominance in the global market has economic implications but also fuels internal tensions over how profits from this resource are distributed. Serious conflict often erupts along the Nile because of increase in resource users, interest and unfavourable climate that expose the region to the vagaries of drought and desertification.

Resource conflict in West Africa is fuelled by resource control struggles particularly due to greed and climate uncertainties. Resource deposit in some areas attract conflict. For instance, the Niger Delta region of Nigeria is perpetually boiling in conflict because of many actors seeking to milk the resources away. Another typical example is Guinea, the country with the

largest bauxite in the world face intense tensions arising from many actors including foreign investors, locals and government.

Table 2 Conflict Duration, Food Insecured person and Refugees

Country	Conflict Duration /Date	Number of food insured person (by percent) 2020- 2022	Number of Refugees (1990 to 2017)
	North Africa	_	
Algeria	Independence conflict- 1954-1962 Civil war- 1991-2002 Ongoing tensions -2000 till date	<2.5	177,086
Egypt	Tensions between Egypt, Ethiopia, and Sudan over the dam escalated - 2013-2020	7.2	185,031
Libya	Civil war -2011-2012 Post Gadafi conflict – 2012-2014 2 nd civil war – 2014-2020 Political tension – 2021 till date	8.4	66,769
Morocco	Rif war- 1920-1927 Independence conflict – 1953-1956 Western Sahara conflict – 1975- 2010 Arab spring – 2011 Political tension 2011 till date	6.3	41,157
Tunisia	Tunisian Revolution related to water shortages, agricultural land disputes, and poverty in 2011 Protests by farmers demanding better access to water and land rights - 2016-2017	3.0	41,387
	Southern Africa		
Zimbabwe	Liberation war – 1972-1980 Post independence conflict – 1980 -2000 Land reform crisis – 2000-2008 Post Mugabe Era tension – 2017 till date	38.4	269,570
Mozambique	Independence war – 1964-1977 Civil war – 1977-1992 Post civil war – 1992 till date	30.5	5,613,141
Botswana	Political tension 1966 – till present)	22.9	1,763
Eswantini	Rigid governance and political crisis	11.6	1,401
Zambia	Political tensions – 1964-2016	29.8	7,414
Lesotho	Water project disputes over the rights of local communities in 1995	46	238

	Continued disputes between Lesotho and		
	South Africa over water-sharing		
	agreements - 2000-2010.		
Namibia	Herero and Nama – 1904-1907	17.1	27,141
1 (dillion	Independence conflict – 1966-1989	1,11	27,111
	Political tensions – 1964-2016		
South Africa	Apartheid era – 1948 – 1994	7.9	53,878
	South African border conflict		
	(Namibia war of independence) -1966-		
	1989		
	Post-apartheid violent – 2012		
Malawi	•	17.8	3,864
	East Africa		
Comoros	Tensions in 1974-1995	13.5	5,232
	Political crisis -1997 till date		
Djibouti	Border conflict with Ethiopia – 1991-	16.8	82,027
	1994		
	Civil war – 1991		
	Ethno-political tension – 1991 – 2000		
Mauritius	Ethno-political tension since	6.8	1,117
	independence		
Eritea	Independence conflict – 1961-1991		8,495,249
	Eritea- Ethiopia war -1998-2000		
Kenya	Mau-Mau uprising – 1952-1960	27.8	167,750
	Post election violence – 2007-2008		
	Al-Shabaab insurgency – 2011 till date		
Tanzania	Border conflict with Malawi – 1967- 1971	23.5	17,835
Madagascar	Political crisis since 1990 till date	51.0	4,325
Seychelles	Political tension due to public policy	4.3	1,972
Somalia	Pre-civil war – 1969-1991	48.7	19,217,481
	Civil war – 1991		
	Black hawk down (Somalia rebel -		
	UN/USA intervention clashes) – 1993		
	Al-Shabaab – 2006 – present	21.0	4.004.474
Ethiopia	Tigray war -2020-2022	21.9	4,086,152
- I	Ethnic conflict – 1991 till date	21.5	0.666.747
Rwanda	Civil war -1990-1994	31.6	8,666,747
TT 1	Genocide – April – July 1994	21.6	655 105
Uganda	Civil war – 1981 – 1986	31.6	655,135
	LRA insurgency – 1987 -2006		
G41 G 1	Post LRA conflict – 1960 -1967	21.4	5 472 006
South Sudan	Civil War following the outbreak of civil	21.4	5,472,996
Dyaman di	war in 2013-2018		10.024.022
Burundi	Civil war – 1993-2005		10,034,032

	Post war conflict – 2005 till date		
Sudan	Disputes over oil-rich regions (e.g.,	11.9	19,217,481
	Abyei), and gold in Darfur lead to		
	tension and civil war and secession of		
	South Sudan apart from nomadic herders		
	and sedentary farmers clashes		
	West Africa		
Sierra Leone	Civil war- 1991-2002	27.8	4,011,73
	Post war conflict – 2002 till date		
Togo	Independence conflict -1960-1967	17.4	865,198
	Rebel conflict -1967 -2005		
	Protest and political tension 2005 till		
	date		
Liberia	1 st Civil war – 1989-1996	38.4	8,433,82
-	2 nd civil war – 1999-2003		, ,-
	Post war crisis – 2003 till date		
Mauritania	Western Sahara Conflict – 1975- 1979	8.7	1,320,94
	Tuareg Rebellion – 1989-1991		
	Ethno-political tension – 1978-2005		
Burkina	Revolutionary conflict – 1983-1987	16.2	21,062
Faso	Campaoire – 1987 -2014		
	Jihadist insurgencies – 2015 till date		
Ghana	Political tension – 1966-1981	4.9	404,105
	Ethno-political crisis – 1992 till date		
Guinea-	Post independence crisis – 1963-1974	37.9	60,656
Bissau	Civil war – 1980-1998		
	Political crisis – 2000 till date		
Guinea	Ethno-political tension – 1957 till date	12.9	184,671
Benin	Post independence conflict -1960-1972	9.9	6,427
republic	Political tension – 1972-1990, 2019-		
	2021		
Gambia	Political tension – 1994-2017	19.6	64,607
Cape Verde	No serious conflict since 1975	18.2	346
	independence		
Côte d'Ivoire	Civil war – 2002-2007	7.7	809,832
(Ivory	Post election crisis-2010-2011		
Coast)	Post war conflict -2011 till date		
Chad	Civil war – 1991-2000	31.4	1,824,18
	Islamic insurgency (Al-Shabaab) – 2000		
771	till date	150	004.040
Nigeria	Civil war – 1967-1970	15.9	991,949
	Niger delta militant – 1990 till date		
	Islamic insurgencies – 2009 till date		
	Fulani herdsmen – 2000- till date		
	Ethno-religious conflict- 1960 till date		

Niger	Post independence crisis – 1960-1995,	16.1	105,707
Triger	2007-2009	10.1	103,707
	Islamic sect – 2010 till date		
Senegal	Casamance conflict – 1982 till present	5.7	509,534
Mali	1st Rebel conflict(Al-Quaeda & Ansar	12.8	1,435,26
141411	Dine – 2012	12.0	1,133,20
	Operation serval (French military) -		
	2013		
	2 nd operation serval conflict - 2014 till		
	date		
	Central Africa		
Democratic	1 st Civil war -1996-1997	33.3	9,521,430
Republic of	2 nd civil war -1998-2003		
Congo	Post -2003 conflict		
(DRC)			
Equatorial	Post-independence unrest -1968-1979		9,18
Guinea	Protest and political tensions – 2005 till		
	date		
Gabon	Independent conflict – 1964	23	2,354
	Post independent conflict – 1964 till date		
Congo	Ethno-political tensions – 2016 till date	35.3	421,423
Republic	Civil war – 1997- 1999		
	Political tensions – 1999 till date		
Central	1 st civil war – 1996- 1997	48.7	3,285,089
African	2^{nd} civil war – 2012-2014		
Republic	Post war conflict – 2014 till date		
Cameroon	Anglophone crisis – 2016 till date	6.4	191,099
	Boko Haram – 2004 till date		
	Border conflict with Chad – 1980		
	-1994		
	Border conflict with Bakassi – 1986-		
	2008		
Angola	Civil war – 1975-2002	21.6	6,283,458
	Post war conflict 2002 till date		
Sao Tome	resource-related tensions from offshore	13.1	787
and Principe	oil exploration and fishing - 2005 till		
	present.		

Source: Author compilation, 2024; FAO, 2020

Generally, conflict has plunge Africa into hunger. A report from AO, ECA and AUC. (2020) shown how about 282 million (20%) of Africans were undernourished. The Global Hunger Index (GHI) calculates food insecurity using four components: undernourishment, child wasting, stunting and child mortality. From the report, Niger and Somalia are the worst hit when considering undernourishment in the entire continent. In North Africa, about 7.5% were food insecure, 11.1% of Southern African were undernourished, 14.6% of West African were food insecure, 29.1% of Central Africa were food insecure, 28.5% of East Africans were undernourished in 2022.

A report by AO, ECA and AUC. (2020) noted that there has been a sharp increase of undernourishment from 199.7million to 256.1 million in Africa with North Africa rinsing from 9.7 to 17 million, Southern Africa (from 3.8 to 5.3 million), East Africa (from 112.3 to 133.1 million), Central Africa (from 37.7 to 44.6 million). According to this data, East Africa has suffered the highest level of malnutrition for the past years. The rate of Obesity in Africa in adult increase from 7.9% in 2000 to 12.8% in 2016. On the other hand, anaemia among women of reproductive years decreased from 44.5% in 2000 to 29.9% in 2019 particularly due to timely intervention. During the same period, the rate of overweight among under five varies between 6.2% in 2000 to 5.3% in 2020 (FAO, ECA and AUC. 2021).

More than 14 million persons are internally displaced in Africa due to conflict and violence, half of them is estimated to be children (UNHCR & UNICEF, 2017). The Democratic Republic of the Congo alone holds 4.5 million of the internally displaced persons at the end of 2017. In 2017 alone, 4.7 million persons got newly displaced within their own country representing 40 percent of the new replacement globally for that year. Between 1990-2017, a total of 118,374,355 was recorded across the nations of Africa (Adesina et al, 2022).

During the first six months of 2023, the most significant changes in internal displacement occurred in Sudan, the Democratic Republic of the Congo, Somalia, Ukraine and Myanmar. In April 2023, war broke out between the Sudanese Army Forces and the Rapid Support Forces in multiple cities in Sudan, including Khartoum, Al Fasher, Merowe, Nyala, Ag Geneina, and El Obeid. This crisis has led to a further deterioration of the humanitarian context in the country, compelling millions of people to flee, with 3 million remaining displaced at mid-2023, and displacement reported to have subsequently further increased. In the Democratic Republic of the Congo fighting between armed groups and the Congolese armed forces intensified in North and South Kivu, and Ituri provinces resulting in 1.3 million new displacements during the first six months of 2023. Persistent insecurity, exacerbated by the effects of a severe drought, caused 892,600 new displacements in Somalia during the reporting period, with the number of people remaining displaced within the country rising to 3.9 million at mid-year. More than half a million new displacements were estimated to have occurred in Ukraine in the first six months of 2023 (560,000), less than a tenth of the displacements reported in the same period of 2022 (UNHCR, 2019).

According to the Protection and Return Monitoring Network led by UNHCR, approximately 1 million individuals have been displaced internally within Somalia as of August 2022. The displaced families face multiple protection risks and have identified livelihood support, food, water, shelter and health as priority needs. Central African Republic, with a 2023 GHI score of 42.3, has the highest score of any country in the 2023 report, indicating an alarming hunger level. The country's 2020–2022 undernourishment rate of 48.7 percent means that nearly half of the population is consistently unable to meet their minimum dietary energy needs. One in 10 children does not live until their fifth birthday, 40.0 percent of children are stunted, and 5.3 percent of children are wasted. Central African Republic has suffered from conflict in recent years, which, along with population displacement, widespread poverty, and underemployment, drives hunger (United Nations 2022; WFP et al. 2022).

Democratic Republic of the Congo, Lesotho, and Niger each have alarming 2023 GHI scores, between 35.1 and 35.7. Niger's GHI score is driven up by its very high rate of child stunting, high rate of child wasting, and very high child mortality rate—the highest in this year's report, at 11.5 percent. The children of Niger have suffered in recent years from conflict-driven

internal displacement and an influx of refugees from neighboring countries, as well as the climate crisis and rising food prices (ActuNiger 2023; UNICEF and MHA 2022).

Nutritional crisis in South Sudan is provisionally designated as alarming: the country's child mortality rate is nearly 10 percent, and roughly one in five people in the country was undernourished in 2020–2022. According to the report, in 2023 nearly two-thirds of the population was estimated to be experiencing crisis-level food insecurity or worse (ActuNiger 2023). The Northern Africa food system is greatly shaken by a combination of climate uncertainties like drought and desertification and this affect food production. The region faced series of conflict particularly Libya, Western Sahara and Sudan and this push them into food importation. The Southern Africa regional food crisis is heavily affected by erratic climate condition, conflict and economic instability, but the impacts is never compared to the Northern African experience.

In East Africa, the uprising of drought and desert encroachment in countries like Ethiopia, Somalia, Kenya and Sudan devastate crops and livestock. Unpredictable rainfall patterns result in either flood or drought. Frequent conflict and closure of border by their rebels in South Sudan, Somalia and Sudan disrupt agricultural production and increase refugees across the region. Poverty, unemployment, inflation, limited irrigation capacity and environmental degradation like soil erosion and deforestation affect food distribution and access.

Hunger is a military strategy to suppress opposition. Food crisis have been an aftermath of frequent regional clashes in Africa. Nigeria-Biafara came to an abrupt end when the Federal government block access to food supply into Biafra territory, the pangs of hunger and hunger-related mortality forces the rebel to surrender for a ceasefire. Food crisis in West Africa is mostly influenced by rising temperature, unpredictable rainfall and drought in places like Niger and Chad. Countries such as Mali, Burkina Faso and Niger face recurrent conflict affect food production. The region's inability to diversify agricultural investment, over-population and dependency on rain-fed agriculture results in regional food shortage.

Across the Central Africa, regional food crisis is driven by a mix of factors that influence food availability, access, stability and distribution. Conflict in South Sudan, Congo DR, Central African Republic are major disruption to food production. This is further compounded by climate variability, poor infrastructure like road, energy supply, and other agricultural-supporting system. There are serious cases of land degradation that reduce crop yield specifically soil erosion and deforestation.

The narrative on food insecurity in Africa is generally conflict-triggered, apart from regional climatic uncertainties that results in drought and flood in various segment of the continent. While the Northern is struggling to break out from drought, desertification and ecological degradation, the Western region that shares border with the Atlantic ocean is affected by flood from maritime airmass. The Central and Eastern region are dominated by nomadic investment which put much pressure on water, land and pasture. In other hand, every region has its peculiar constraint and thus, policy on food security is better when it is viewed from regional perspective. The United Nations and other organisations have been committed in rendering humanitarian services in conflict-torn regions. In spite of substantial commitment, nutritional crisis is widespread (World Food Programme, 2019).

3.1 Materials and method

The study adopted a two-pronged approach using narratives, interviews and internet materials. Multi-stage sampling was employed in selecting three recognised geo-political

regions out of six. Out of the six (6) geo-political zones in Nigeria namely; North East, North West, North Central, South East, South West and South South, two conflict-ridden states will be purposively selected from the North East (Borno and Bauchi), North Central (Plateau and Benue) and South East (Anambra and Enugu).

The selected states have experienced series of small arms conflict ranging from Boko haram in the North East, Fulani Herdsmen clash in the North Central and IPOB and unknown gun men in the South East.

Three local government areas (LGAs) from each states were selected totalling nine (9) for the study. Three communities from each LGAs were selected through simple random sampling technique making a total of 27 villages. Taro Yamane formula for sample size determination was employed to established the number of respondents which was put at 384. Since the study area are either actively involved in conflict or had once been affected by conflict, security personnel were hired to accompany the research team. The research team was divided into two: the Northerners and Southerners. The Northern group which had about three researchers and two security personnel likewise the southern group were able to penetrate the vulnerable communities as well as IDPs camps and were able to relates with the casualties in local dialect without suspicion and hurts.

The respondents were assured of safety and anonymity and were not forced in the interaction. Some palliatives were voluntarily offered to them so as to capture their attention easily. Through this palliative, the participation was encouraging and the respondents appealed for a revisit in their various camps. The study was conducted between June 2024 to November 2024. Three indepth interviews were conducted in each community in an attempt to obtain information on the effect of armed conflict on local food production and supply chain. A cross section of traditional chief and Heads of youth council was involved in the interactive session. The beauty of the study centred on combination of methodologies including a mix of narratives, empirical review, analysis of official reports and live experiences of affected persons. Chisquare was used to test for the impact of small arms conflict on food availability in conflict prone areas in Nigeria.

3.2 Study area

This study was conducted in Nigeria spanning over three geo-political zones, but with focus on six states battling with small arms and light weapon conflict. The table shows the study area sampled:

Table 3.1: Sampled location for study

S/N	States	Local Government Area	No. of questionnaires
1	Benue	Guma, Logo and Ado	64
2	Plateau	Barkin Ladi, Riyom and	64
		Langtang	
3	Borno	Bama, Kaga and Abadam	64
4	Bauchi	Dass, Misau and Bogoro	64
5	Anambra	Orumba, Aguat and Idemili	64
6	Enugu	Udi, Nsukka and Uzo-Nwani	64

4. 1 Results and Findings

Table 4.1: Household nutritional condition

The variables as used in the instrument for assessing household nutritional condition were: duration of feeding, size of palliative, food mix, substituted indigenous food availability, ability to secure protein rich food, household size and rate of balance diet consumed by household.

S/N	OPTIONS	FREQUENCY & PERCENTAGE				TOTAL
		YES	%		NO %	
1.	Sometimes, I eat once a day	250	(65.1%)	134	(34.9%)	384
2.	Palliatives offered to us are inadequate	174	(45.3%)	210	(54.7%)	384
3.	I repeat carbohydrate food for many days	324	(84.4%)	60	(15.6%)	384
4.	We have lost our Indigenous food system	210	(54.7%)	174	(45.3%)	384
5.	I cant afford protein rich food	200	(52.1%)	184	(47.9%)	384
6.	My family size is larger than the available food	174	(45.3%)	210	(54.7%)	384
7.	Its been a long time I ate balanced diet	235	(61.2%)	149	(38.8%)	384

Field Survey, 2024

Table 4.1 shows the nutritional condition of households in conflict-torn areas. Out of 384 respondents, 250 respondents (65.1%) agree that they oftentimes eat once a day. It was noticed that palliatives offered to the affected persons are inadequate with 174 (45.3%) agreed respondents and 210 (54.7%) disagreed. Repetition of carbohydrate food for many days contributed 84.4% of the nutritional imbalance in the study area and 60 respondents (15.6%) disagreed. Lost of indigenous food system contributed to nutritional crisis with 210 agreed respondents (54.7%) and 174 (45.3%) disagreed. Inability to secure protein rich food also contributed to nutritional crisis with 200 respondents (52.1%). Lastly, 235 respondents (61.2%) agreed that the larger family size influence household nutritional condition while 149 respondents (38.8%) disagreed. Inability to eat balanced diet contributed 61.2% of nutritional problems. The implications is that the highest contributor to the issue of household nutritional crisis is repeated carbohydrate food for many days as reflected in Table 4.1.

Tables 4.2: Effect of small arms and light weapon prevalence on food availability and prices in populace in Nigeria

S/N	OPTIONS		FREQUENC	TOTAL		
		YES	%		NO %	
1.	Invasion of farmlands, destroy our crops	230	(59.9%)	154	(40.1%)	384
2.	Attack on farmers, discourages food production	164	(42.7%)	220	(57.3%)	384
3.	Attack on food reserves, increase food prices	314	(81.8%)	70	(18.2%)	384
4.	Attack of food transporters, cause food scarcity	230	(54.7%)	154	(45.3%)	384
5.	Attack of food middlemen, results in high food prices	220	(59.9%)	164	(40.1%)	384
6.	Disruption of food production, generally results in food scarcity	184	(45.3%)	200	(54.7%)	384
7.	Small arms violence forces farmers to seek alternative livelihood	235	(47.9%)	149	(52.1%)	384
8.	Small arms violence reduces the number of food producers	284	(74%)	100	(26%)	384
9.	Small arms violence displace farmers and retailers	250	(65.1%)	134	(34.9%)	384

Field Survey, 2024

Table 4.2 shows the effect of small arms and light weapon prevalence on food availability and prices in populace in Nigeria. Out of 384 respondents, 230 respondents (59.9%) agree that invasion of farmlands destroys their crops and thus food crisis occurs. It was noticed that attack on farmers, discourages food production with 164 (42.7%) agreed respondents and 220 (57.3%) disagreed. Attack on food reserves, which accompanies increase in food prices contributed 81.8% of the food availability and prices constraints and 70 respondents (18.2%) disagreed. Attack of food transporters, cause food scarcity and this contributed to nutritional crisis with 230 agreed respondents (54.7%) and 154 (45.3%) disagreed. Attack of food middlemen, results in high food prices and was seen as the reason for nutritional crisis with 220 respondents (59.9%). In addition, Disruption of food production, related with food scarcity is a factor influencing household nutrition with 184 agreed respondents (45.3%) and 200 (54.7%) disagreed. Some believe that small arms violence forces farmers to seek alternative livelihood with 235 respondents (61.2%) agreed. Some also added that small arms violence reduces the number of food producers and was represented by 284 respondents (74%). It was also hinted that small arms violence displace farmers and retailers with 65.1% of consent.

Tables 4.3: Effect of small arms violence on community development

S/N	OPTIONS	FF	TOTAL			
		YES	%		NO %	
1.	Small arms violence directly affect income of community dwellers	240	(62.5%)	164	(37.5%)	384
2.	Arm conflicts weaken the local economic base	264	(68.8%)	120	(31.2%)	384
3.	Small arms conflict slow down community development	310	(80.7%)	74	(18.3%)	384
4.	Violence is associated with population displacement	234	(60.9%)	150	(39.3%)	384
5.	Socio-economic activities becomes dormant	240	(62.5%)	144	(37.5%)	384
6.	Entrepreneurs shut down businesses	182	(47.4%)	202	(52.6%)	384

Field Survey, 2024

From the responses obtained as expressed in the Table 4.3, it was revealed that small arms violence directly affects income of community dwellers and about 240 (62.5%) responded YES while 164 (37%) respondents said NO. As for issues of arm conflicts weakening the local economic base, 264 (68.8%) respondents gave a positive affirmation while 120 (31.2%) said NO. It was further noted that violence is associated with population displacement and with this, 301 (80.7%) of respondents said YES while 74 (18.3%) said NO. Moreover, about 234 (60.9%) respondents were of opinion that socio-economic activities become dormant because of conflict. 240 (62.5%) respondents believe that entrepreneurs shut down businesses at the event of small arms and light weapons display.

Testing for Hypothesis

Chi-square was used to test for the impact of small arms conflict on the food availability using SPSS.

The result for hypothesis tested for the significant impact of small arms conflict on the food availability. The result produces Pearson Chi-Square value of 236.102^a, degree of freedom (df) of 12 and a P-value (2-sided) of 0.000. From the result, since the P-value is less than 0.05 (significance level), the null hypothesis is rejected and can therefore be concluded that there is significant impact of small arms conflict on the food availability in the study area.

4.2 Discussion

On the spatial distribution of conflict-prone communities in the six (6) states, the Northern region had tension arising mostly from Fulani herdsmen and Bokoharam, whereas the southern fringe were affected by incidences of IPOB, Biafran agitation and ethnic clashes over cross border land. Major hit areas in Benue State were identified to be Guma, Logo, Riyom, Agatu, Vandeikya and Katsina-ala LGAs.

In Bauchi, major hit areas include Toro, Ningi, Shira, Zaki, Kirfi, Alkaleri LGAs whereas Borno areas are Maiduguri, Bama, Gwoza, Chibok, Damboa, Konduga, Ngala, Kaga, Mobbar

and Abadam LGAs. Arms conflict in Plateau are Jos Urban, Bassa, Riyom, Bokos, Mangu, Shendam, Kanke, Langtang South and North LGAs. Conflict in Enugu is oftentimes land dispute and traditional rulers title clash, beside the IPOB and Biafran agitations. Hit areas are Ezeagu, Udi, Nkanu East and West, Igboeze and Uzo-Uwani. Lastly, conflict in Anambra is connected to IPOB and Biafran agitation particularly in places like Orumba, Aguata and Idemili.

Considering the nutritional condition of households in conflict-prone areas. A greater number of persons could not eat three square meal and this to a greater extent affected their nutritional status. Out of 384 respondents, 250 respondents (65.1%) admitted that they hardly eat three times a day. The cost of food influences the number of times food is allotted to households. Malnutrition likewise other nutrition-related disorder in children and aged became a pressing problem in the study area. We spotted children suffering from kwashiorkor and little intervention services was available at the time of the study.

It was noticed that palliatives offered to the affected persons are inadequate. Palliatives are just short term services meant to alleviate the burden of food crisis, but not a long term strategy. In the study area, what is needed are medium and long term intervention services. About 174 (45.3%) respondents cried out that palliatives allotted to them are inadequate and non-satisfactory.

Some respondents were of opinion that they lack the basic nutritional requirement. They only eat to survive not for body building. Some household narrated that they repeat a certain food for many days due to lack of alternative. A larger population of people sampled (84.4%) admitted that they repeated carbohydrate food for many days and resulting in nutritional imbalance. Excess carbohydrate results in carbotoxicity and blood sugar complications.

It was found out that small arms conflict cause loss of indigenous food system because farmers whose farmlands are destroyed will seek other businesses to earn a living and the pressure for high cost imported food will plunge the entire community and region into nutritional crisis.

From field survey, about 210 agreed respondents (54.7%) agreed that their indigenous food system is nearly extinct. Findings also revealed that the household has low protein in-take due to destruction of the food system. Low protein intake is associated with kwashiorkor. The problem of large family size equally affected the nutritional status of the sampled population. In Benue, Plateau, Borno and Bauchi, most household were more than 10 excluding children. From field survey a total of 235 respondents (61.2%) agreed that larger family size influence household nutritional condition in the study area and lastly, inability to eat balanced diet contributed 61.2% of nutritional problems. Generally, the highest contributor to the issue of household nutritional crisis was the case of repeated carbohydrate food. Findings further dig out information on the effect of small arms and light weapon prevalence on food availability and prices in populace in Nigeria. Out of 384 respondents, 230 respondents (59.9%) agree that invasion of farmlands destroys their crops and thus food crisis was rampant. It was noticed that attack on farmers, discourages food production with 164 (42.7%) respondents who attested to this proposition. It was also discovered that once attack is launched on food reserves, there is a rebound impact on food prices and this contributed to 81.8% responses on the effect of food reserve attack on food availability and prices in the study area. Most times, attack of food transporters cause food scarcity and this contributed to nutritional crisis with 230 agreed respondents (54.7%). Attack of food middlemen, results in high food prices and was seen as the reason for nutritional crisis with 220 respondents (59.9%). In addition, Disruption of food production, related with food scarcity is a factor influencing household nutrition with 184 agreed respondents (45.3%). Some respondents added that small arms violence forces farmers to seek alternative livelihood with 235 respondents (61.2%) who admitted this, while others hinted that small arms violence reduces the number of food producers and was represented by 284 respondents (74%). Information on the effect of small arms violence on farmer's displacement. It was also noted that small arms violence displace farmers and retailers with 65.1% of consent. Findings on the effect of small arms violence on community development is vast. Firstly, it was revealed that small arms violence directly affects income of community dwellers and about 240 (62.5%) respondents were directly affected.

Small arms and light weapons conflicts usually weakens the local economic base. From field survey about 264 (68.8%) respondents gave a positive affirmation. It was further noted that violence is associated with population displacement and with this, 301 (80.7%) of respondents admitted this wholeheartedly. Moreover, about 234 (60.9%) respondents were of opinion that socio-economic activities became dormant because of conflict, whereas 240 (62.5%) respondents admitted that entrepreneurs shut down their businesses at the event of conflict. When once, entrepreneurs or investors relocate from a region, it goes away with the weight of development to a destination community and departed region suffers significantly. This is the problem of most communities visited and from the interview conducted, it was found out that so many shop owners and small scale enterprises had left the conflict-prone communities and town and this hinders development, the flow of money, hunger and nutritional crisis.

Interview conducted at the study area sought to complement the information gotten from questionnaires. The intensity of conflict intensity was assessed and it was revealed that the level of violence was high in Northern States: Borno, Bauchi and Benue; medium in Jos and less in Enugu and Anambra. It was noticed that some of the conflict lasted up to 2 days, some hours and in some location up to a week. Findings also revealed that rural areas were more affected than the urban centres. This could be due to the fact that most rural areas do not have adequate security personnel's presence to contend with the hoodlums. Considering access to food supply, in some places, information on blockades, destruction of vehicles and shops directly/indirectly affect food access. We noticed that right at the IDPs camps, food provision was inadequate as compared with the mammoth refugees sighted. At the IDPs camps, we also realised that children and elderly persons were the most vulnerable, with cases of stunting, wasting, kwashiorkor being prevalent. The struggle to find food adequately among refugee was so alarming. Some humanitarian agencies, NGOs and benevolent individuals contributed their best to make food available, there was serious financial constraint to provide a consistent service to the refugee. Some respondents admitted that conflict affected their breastfeeding rates, use of complementary feeding, infant formula, and access to clean water.

Income distribution and how conflict impacts household income or purchasing power for food was assessed and it was realised that many households had a challenge in getting affordable food items. Fluctuations in food prices was due to different factors: infrastructure damage, roadblocks, or trade interruptions. Apart from food, health infrastructure availability and accessibility of health services and nutritional support programs was limited. As a result, some participants in the interview complain of the spread of diseases related to malnutrition. At Borno and Benue States, these changes in local food habits due to the non-availability of food or cultural shifts during conflict, translated into a behavioural abnormality and temperament. Questions were asked on household coping mechanisms and greater number of participants added that they have developed practices such as skipping meals or relying on cheaper, less nutritious foods so as to stay alive.

Conclusion

Conflict has a profound and long-lasting impact on nutritional health. Through the destruction of agricultural infrastructure, disruption of food systems, and displacement of populations, conflict exacerbates food insecurity and leads to a wide range of nutritional disorders, including stunting, wasting, and micronutrient deficiencies. The international community must prioritize food security and nutrition in humanitarian responses to conflict, focusing on both immediate relief and long-term recovery to address the nutritional needs of populations affected by small arms conflict. The following recommendations were identified:

- Investment on global and local disarmament initiatives is necessary to reduce the proliferation of small arms in conflict zones, though this strategy has been heavily criticised for failing to recognise human right.
- An ideal governance can prevent the rise of opposition and rebel groups.
- Support peacebuilding efforts to resolve underlying conflicts, fostering dialogue and reconciliation.
- Ensure safe access for humanitarian organizations to deliver aid to affected populations, particularly children.
- Implement agricultural programs and nutrition interventions that target vulnerable communities, focusing on children, pregnant women and people with disability.
- Another national response to stopping illicit arms proliferation legislation has been enacted is for African countries to strengthen their border security.
- In addition, community engagement via reintegration of ex-combatants have been introduced in some local communities.
- Long-term solutions to nutritional disorders in conflict zones should involve rebuilding local food systems and promoting sustainable agriculture. Restoring agricultural livelihoods helps communities regain food security and promotes resilience in the face of future crises.
- Community-based nutrition programs can help address malnutrition at the local level. These programs focus on promoting breastfeeding, improving infant and young child feeding practices, and providing micronutrient supplementation. In conflict zones, such programs are delivered by community health workers who are trained to recognize signs of malnutrition and provide appropriate interventions

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