

Assessing the status quo of Sustainable Development Goal number 2 in Africa

Shikha Vyas-Doorgapersad

School of Public Management, Governance and Public Policy, College of Business and Economics
University of Johannesburg, South Africa
Tel: +27 11 559 4720, Cell: + 72 463 8685
Corresponding author: svyas-doorgapersad@uj.ac.za
ORCID: <https://orcid.org/0000-0002-8146-344X>

© Authour(s)

OIDA International Journal of Sustainable Development, Ontario International Development Agency, Canada.
ISSN 1923-6654 (print) ISSN 1923-6662 (online) www.oidaijsd.com
Also available at <https://www.ssrn.com/index.cfm/en/oida-intl-journal-sustainable-dev/>

Abstract: The aim of the study is to examine the status quo of sustainable development goal (SDG) 2 that seeks to achieve zero hunger. The goal in an explanatory manner demands hunger to be eradicated through food security interventions, adequate nutrition-based food products and investment in agriculture to harvest sustainable food varieties. The focus of the study is SDG2 (food security) that is examined in the context of Africa (locus), exploring challenges hampering the realisation of selected development goal. The main research question considered for the study is: what are the reasons that Africa is struggling to achieve SDG2? To find answers, the study utilised a qualitative desktop analysis, and information is compiled through literature review. Various journal articles, dissertations and theses, internet sources, official documents of Statista, news reports, are considered to obtain relevant and timely information related to food security challenges in African context. The information is further analysed through document analysis and conceptual analysis. The review of literature reveals various socio-economic and environmental challenges that are affecting the effective implementation of SDG2 and hence causing food insecurity in Africa. There are various factors leading to the non-realisation of SDG2. The significant ones are environmental degradation, wars, economic meltdown, lack of employment opportunities, trade restrictions, to state a few. In the case of Africa, conflict can also be added as a factor that impacts on the political landscape, affecting the lack of implementation of government policies for economic development. Climate change's unpredictability and harsh weather patterns also threaten systems for agriculture. Income disparity exacerbates the situation. Some of the proposed solutions for these challenges include effective governance at the local, national, and international which is imperative for enhancing food security by supporting production and availability; managing food markets and distributing natural resources, and provision of protective safety nets, including financial infrastructure which can reduce risks and boost resilience for vulnerable communities experiencing food instability and famine. Despite such measures implemented across the globe, the elimination of hunger and food security remains elusive for many developing countries across the globe in general, and Africa in particular. The recommendations are offered for improvement. The study aims to develop a longitudinal and comparative study to explore the SDG2 implementation in various African countries. The data will be compiled to conduct desktop analysis of selected countries, exploring SDG2 challenges. The recommendations will focus on global best practices that African countries can consider improving the situation in the country-specific contexts.

Keywords: Africa, food security, modernisation theory, qualitative study, sustainable development goal (SDG), SDG 2.

Introduction

Africa has not met its targets for 2030's SDG 2 on Zero Hunger, as stressed by Otegunrin (2021:1). The progress and efforts being made now are insufficient to guarantee the realization of the goal. To create opportunities for collaboration and realise the promise of achieving 'zero hunger' across the continent, Africa is required to promote the SDG agenda at the national, regional, and international levels (Atukunda, Eide, Kardel, Iversen and Westerberg 2021: 1). Numerous African countries face significant obstacles that exacerbate the continent's high rate of hunger and food insecurity. High levels of poverty, significant losses before and after harvest brought on by raging pests and illnesses, unemployment, social marginalisation, and corruption among others (Otegunrin 2021:2) all contribute to food insecurity in Africa. Additionally, it is important to note that, current trends indicate that the governments in Sub-Saharan Africa (SSA) failed to advocate for the inclusion of food production in regional economies and to make strategic investments in the development of rural economies (Bjornlund, Bjornlund and Van

Rooyen 2022:854). Thus, it can be argued that achieving SDG2 is proving to be elusive for most governments. The status of the sustainable development goal is therefore compromised by the interplay of factors which impede the realisation of self-sufficiency in the continent.

According to the 2019 Ibrahim Forum Report (Rocca and Schultes 2020:1), agriculture accounts for up to sixty percent of jobs on the continent and represents almost thirty percent of the continent's Gross Domestic Product (GDP), but despite this, Africa still depends significantly on food imports. It is given that eight African countries acquire imports to cater for their demand for food. These countries are Botswana, Seychelles, Mauritania, Lesotho, the Gambia, Somalia, Djibouti and Cabo Verde. Net food imports are rising quickly, and this is linked to the rising food demand and changing consumption trends. There are also projections that these figures will more than triple from \$35.0 billion in 2015 to over \$110.0 billion by 2025 (Rocca and Schultes 2020: 1). This scenario presents a picture whereby achieving sustainable development goal number 2 seems impossible. A general reflection on the performance of the agricultural sector indicates that the continent is struggling to feed itself and achieving zero hunger will need a complete overhaul of how things are done. It is important to note that indicators of hunger in Africa have been improving modestly or declining altogether (Beyene 2023). Undernourishment was 19.1 percent of the general population in 2019; by 2030, it is predicted to rise to 25.7 percent (Atukunda et.al. 2021: 1). The continent continues to struggle with the highest incidence of undernourishment. According to statistics, one in four persons could be missing out on getting enough nutrition (Hlongwane and Vyas-Doorgapersad 2023:36). The Food and Agriculture Organisation (FAO) reports that 33 countries in Africa and 45 other countries across the world urgently require outside food aid (World Bank (WB) 2024:1). With all these entangling factors, meeting the targets for SDG2 may be difficult for most countries in Africa.

Materials and Methods

Qualitative research is considered for the study. When there is a lack of knowledge about a subject or phenomenon and one wishes to find out more, qualitative research is taken into consideration for the study, highlights Johnson and Onwuegbuzie (2004, in Antwi & Hamza 2015:220, further cited in Jansen 2024:18). The information was compiled through literature review, which, according to Machi and McEvoy (2012:4, in Mutenga 2020:32), is a written report that makes a persuasive argument based on extensive comprehension and understanding of the existing knowledge regarding a particular subject of study. The statement was supported by Boswell and Cannon (2011, in Mutandwa 2022:39) stating that an identification of the known and unknown aspects of a phenomenon under investigation is the primary goal of a literature review. For the study, the information was analysed through conceptual and document analysis. As observed by Mutenga (2021, in Vyas-Doorgapersad 2022a:3), to draw conclusions, it is essential to examine the relationships between variables and concepts influencing the phenomenon under study. Conceptual analysis offers a thorough analysis of theories and major concepts used when conducting a study. As also suggested by Maxwell (2005) and adapted by Nyikadzino and Vyas-Doorgapersad (2020) and cited in Vyas-Doorgapersad (2022b:266) a system of ideas, presumptions, expectations, beliefs, and theories that guide research can be viewed as the conceptual analysis. On the other hand, reviewing institutional documents and/or records with the goal of extracting specific output that responds to research questions is known as document analysis, states Frey (2018:1, in Soga 2022:52).

To this study, the modernisation theory is considered as a theoretical framework. The idea of global economic integration forms the foundation of modernisation theory. It is recognised as a method for lowering food insecurity within a nation by enacting measures like foreign trade and investments to change society from a traditional to a more modern one, explains Wallerstein (1974:202, in Hlongwani 2023:26). The theory was also supported by Subramaniam and Bunka (n.d.:3) stating that global economic integration is seen as essential by modernisation theory. For developing nations to advance their modernisation, foreign investment and international trade are portrayed as essential tools. Access to global markets makes it possible to take advantage of opportunities, ideas, technology, and capital that would not be available otherwise. The utilisation of comparative advantage by nations leads to global interdependence, whereby production processes are positioned where they yield the highest returns. According to the theory, these connections could raise real wages, prevent inequality in economic growth, and stabilise input prices on a worldwide scale (Subramaniam & Bunka n.d.:3). Wallerstein (1974:202, in Hlongwani 2023:26), opinions are worth mentioning that such substantial investments boost the nation's economy and result in the expansion of resources that support the process of ensuring food security. There are many philosophical schools, in the context of this study is neo-liberal, that fails to conceptualise and contextualise SDGs. It is therefore important to note that, as is the case with policies pertaining to many other resources, the hegemonic and destructive face of neoliberalism is revealed upon examination of global food policy. Economic advice attached to this appealing discourse only results in poverty and dependency, despite neoliberalism's promises of development and freedom for the impoverished, as stressed by Kutlu

(2016:15). The overemphasis on economic growth as the primary driver of sustainable development, and especially the reduction of poverty, is one of the reasons why neoliberal policies have not been able to meet the goals of sustainable development. To address patterns and benefit distribution down the road, many neoliberal approaches and interventions prioritise accelerating growth. However, the underlying needs of the poor have not been adequately met by the trickle-down theory. It greatly deteriorates the natural environment and only benefits a small number of people, opines Mahlatsi (2021:66). This statement is supported by Kutlu (2016:15) stating that the food policies imposed by neoliberalism on the impoverished disregard cultural and ecological values and are typically not a viable or effective option, even when considering the financial aspect. In addition to exacerbating the food crisis that emerged in the 2006–2008 period, these policies, which endanger biodiversity, deny people access to land and food, and create environmental issues, will also pose threats, and create crises affecting numerous aspects of human security if the necessary steps are not taken (Kutlu 2016:15). For this reason, the modernisation theory has been endorsed for the study since it aims to explain the process of social transformation and pinpoint social factors that influence a society's development. In comparison to premodern or traditional societies, it is argued that modern societies are stronger and smarter. A few examples of the advancements that have a major impact on the sustainability of food production and distribution are food technology and transportation methods, explains Wallerstein (1974:202, in Hlongwani 2023:26).

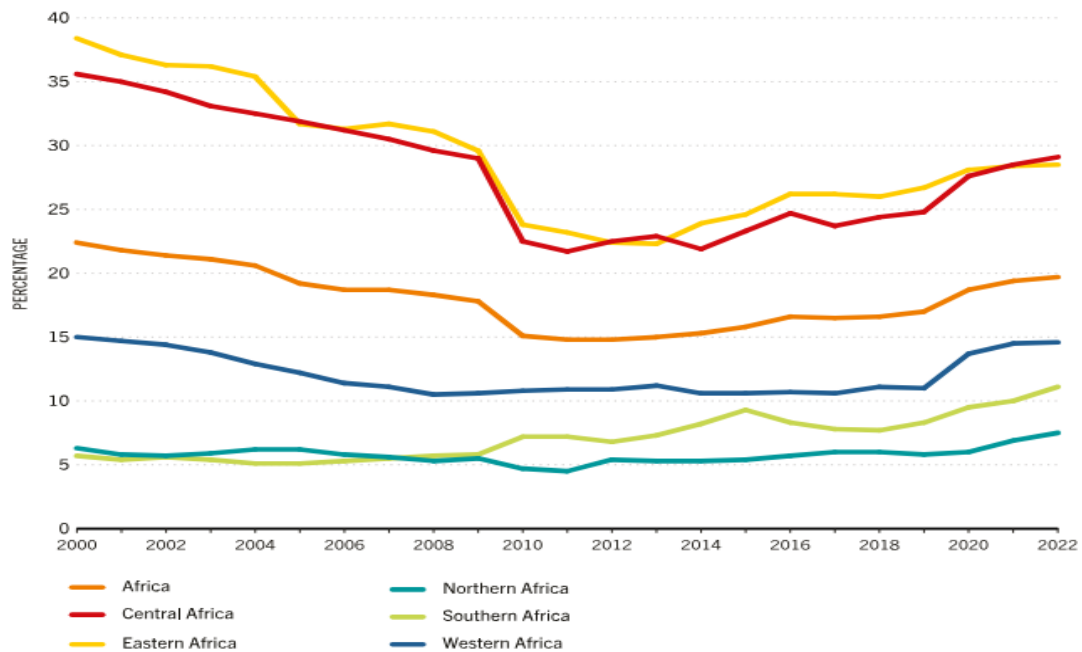
Results and Discussion

From the review of literature compiled under this section, the following aspects are discussed: the section highlights the statistics related to food insecurity in Africa, where the trends showing increase/decrease of food insecurity in Africa are recorded in the narrative. This information includes various challenges relating to non-realisation of SDG2 in the region. The article concludes by offering recommendations for improvement.

Statistics of food insecurity in Africa

Due to increasing inequality in general as well as income inequality, 27% of the population experienced severe food insecurity in 2016 (Bjornlund, Bjornlund and Van Rooyen 2022:846). This situation has arisen, notwithstanding the fact that most African countries are net-exporters of agricultural commodities. Rural economic growth has suffered because of agricultural policies for national food sovereignty that prioritise large farms and western technology (Fox & Jayne, 2020 in Bjornlund et.al. 2022:846). In 2022, the prevalence of undernourishment ranged from 7.5 percent in Northern Africa to 11 percent in Southern Africa, 15 percent in Western Africa and about 29 percent in both Central and Eastern Africa (FAO 2023), see Figure 1.

Figure 1: Prevalence of undernourishment in Africa by subregion



Source: Food and Agriculture Organisation (FAO) 2023, in Food and Agriculture Organisation (FAO), African Union Commission (AUC), Economic Commission for Africa (ECA) and World Food Programme (WFP) 2023.

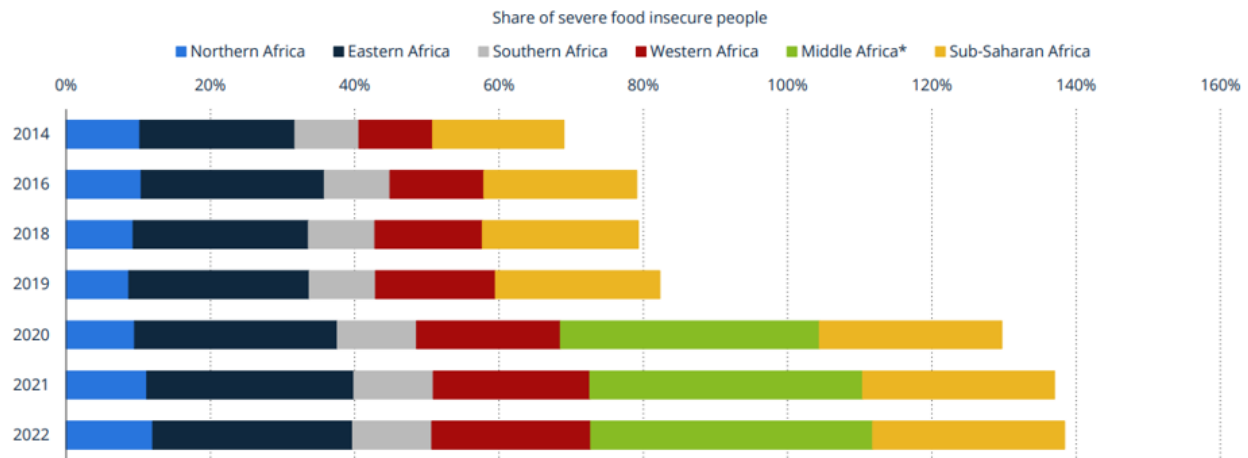
Food insecurity has affected children as well. This statement is substantiated with the fact that with ravaging hunger and starvation on the continent, children under five in SSA continue to face an elevated prevalence of malnutrition. Overweight prevalence is 8.15% on average, which is higher than the global average of 5.7% (Beyene 2023:18). Stunting is significantly more prevalent than the global average of 22%, at 30.825% (Beyene 2023:18). In contrast, the prevalence of wasting in SSA countries is 5.375%, greater than in most other regions, including North America, Latin America and the Caribbean, East Asia, Central Asia and Western Asia (Beyene 2023:16). All these statistics point to a negative trajectory where Africa will be the hub of negative development failing to meet the targets of the 2030 agenda in general and goal number 2 in particular.

A cursory view of what is happening in the horn of Africa reveals that the region is struggling. High levels of food insecurity affect people in Ethiopia's northern, eastern, and southern regions. Insecurity and conflict are the main causes, but climate change is also a formidable factor (Delgado, Tschunkert and Smith 2023:12). Approximately 8 million people in the south and south-east are impacted by a protracted drought. Eighty-three percent of the people in the north affected by the war also lack access to food (Delgado et.al. 2023:12). The war in Ukraine and unfavourable macroeconomic conditions have made this worse, causing high inflation rates in the world, including Africa. By its very nature, food insecurity exposes individuals to a few challenges that have some ripple effects and tend to reinforce the poverty and malnutrition that have characterised the region as a whole.

Being part of the global village, Africa has not been spurred by the food crises that followed the war in Ukraine as well as inflation trends that are dominating most parts of the world. Indeed, many countries' domestic food costs remained high, mostly due to depreciating currencies, conflict, bad weather, and insecurity (WB 2024:1). The disruption of shipping routes such as the Red Sea, and the Panama Canal, increases the cost of importing food, which presents additional obstacles (WB 2024:1). Therefore, meeting the targets for most countries in Africa will be very difficult. Also to note that, the biophysical and socioeconomic conditions of Africa proved to be incompatible with the western agricultural production techniques, high-input, high-output production model (Bjornlund et.al. 2022:857). This included producing rice, wheat, and maize—three commodities that were not particularly favored in Sub-Saharan Africa. Governments were unable to provide food security for families and communities as a result (Bjornlund et.al. 2022:857). In this light, external policies have undermined the local production capacities of African countries which are now struggling to meet food security requirements.

With the total food production going down, there is evidence that most African countries are failing to feed the neediest, that is children, the elderly and the sick. According to Delgado et.al. (2023:14), the three most severely affected nations are Burkina Faso, Mali, and Niger, where around 12.7 million individuals are thought to be in Integrated Food Security (IPC) Phase 3 or above. The Famine Early Warning Systems Network (FEWS NET) 2024 explains that “the use of the Integrated Food Security Phase Classification (IPC) scale for Acute Food Insecurity is a landmark in the fight against global hunger. Widely accepted by the international community, this five-phase scale provides common standards for classifying the severity of acute food insecurity. Based on common standards and language, this scale is intended to help governments and other humanitarian actors quickly understand a situation of acute food insecurity (or anticipated acute food insecurity) and take action” (FEWS NET 2024). It is further explained by FEWS NET (2024) that “the IPC Acute Malnutrition Scale is a five-phase scale of increasing severity: Phase 1: Acceptable; Phase 2: Alert; Phase 3: Serious; Phase 4: Critical; Phase 5: Extremely Critical. Each phase is characterized by a certain prevalence of acute malnutrition” (FEWS NET 2024). Regarding the statistical concern, an additional 7 to 10 million people will likely encounter food insecurity because of the war in Ukraine, which is predicted to worsen the situation by raising food prices globally. Because of their greater reliance on natural resources, up to 90% of the population works in agriculture—the Sahelian states are especially vulnerable to climate change (Delgado et.al. 2023:14). It is this vulnerability which is further complicating food security among the general populace. The statistics show that the number of people experiencing food insecurity during the period of 1 April 2022 to 31 March 2023 is estimated to be 55.7 million in the 12 Member States that provided data for the Regional Synthesis Report on Food Security, Nutrition, and Vulnerability (Southern African Development Community (SADC) 2022:26, also refer to ReliefWeb 2022). Even in the context of SSA, it is recorded that Nigeria, Burundi, Madagascar, and Sierra Leone had the highest food insecurity in SSA and the continent (Galal 2023:1; Statista 2024). The detailed version is recorded in Figure 2.

Figure 2: Prevalence of severe food insecurity in Africa from 2014 to 2022, by sub-region



Source: Statista 2024.

The statistics in figure 2 are supported by the opinions of Sasu (2023; Statista 2024), stating that, Middle Africa is the sub-region with the highest level of food insecurity in Africa. As of 2022, 39.1 percent of the sub-region's population was food insecure. Sub-Saharan Africa followed, with a prevalence of roughly 27 percent in the same year. Furthermore, over the observed period, the prevalence of the population which had experienced hunger increased across the regions. Overall, compared to other world regions, food insecurity is very high in Africa.

Challenges related to food security in Africa

There are various reasons contributing to food insecurity in the region. Incidences of war, violence and civil unrest are also negatively impacting the production of food in the region. The year 2020 saw a 44 percent increase in attacks by militant Islamist organisations in the Sahel, which led to the displacement of 1.7 million people, many of whom depend on food aid. Food and trade have also been hampered by insecurity (Africa Centre for Strategic Studies 2021: 1). Due to the ongoing violence in Ethiopia, food insecurity is particularly severe in Tigray. While much of the territory is still inaccessible to the United Nations (UN) and relief organisations, reports of starvation and malnutrition are starting to surface (Africa Centre for Strategic Studies 2021: 1). It is critical to note that those who are facing food shortages in Africa are residing in the rural areas where they depend on a hand to mouth type of production.

Incidences of violent wars and conflicts have exposed certain regions such that they now fail to provide enough food for their communities. For example, a large portion of the 4.9 million Cameroonians that suffer from severe food insecurity are concentrated in the Anglophone Northwest and Southwest of the nation, where conflict between the armed forces and separatists persists. A growing number of people have been forced to flee Boko Haram's attacks in Cameroon's Far North Region (Africa Centre for Strategic Studies 2021:1). The 2023 statistics show that, an estimated 82 percent of the record 149 million Africans facing acute food insecurity are in conflict-affected countries underscoring that conflict continues to be the primary driver of Africa's food crisis (Africa Centre for Strategic Studies 2023). While 38 African countries are experiencing some level of acute food insecurity, roughly two-thirds of this threat is concentrated in five countries: the Democratic Republic of the Congo (DRC), Nigeria, Sudan, Ethiopia, and South Sudan—all of which are conflict-affected (Africa Centre for Strategic Studies 2023), see Table 1.

Table 1: African countries with the largest populations facing food insecurity

Country	Conflict	2023 Population Facing Acute Food Insecurity (Millions)	Percent Change from 2022 (%)	Percent Population Affected (%)
DRC	✓	25.4	-3.9	25.7
Nigeria	✓	24.8	27.7	11.4
Sudan	✓	20.3	110.3	43.3
Ethiopia	✓	20.1	-14.8	16.3
South Sudan	✓	7.8	17	71.1
Malawi		4.4	67.2	21.6
Somalia	✓	4.3	0.5	24.4
Zimbabwe		3.5	16.7	21.4
Burkina Faso	✓	3.4	-3	14.8
Niger	✓	3.3	-25.5	12.5
Mozambique	✓	3.1	0	9.5
CAR	✓	3	12.7	53.6

Source: Food and Agriculture Organisation (FAO), Integrated Food Security Phase Classification (IPC), Famine Early Warning Systems Network (FEWS NET), World Food Programme (WFP), in Africa Centre for Strategic Studies 2023.

The inter-regional difference exposes certain parts of the continent to inequality and jeopardises any efforts to meet the targets of the 2030 agenda where no one should be left behind.

Half of the 10 worst food crises in 2019 occurred in Africa: in the Democratic Republic of Congo, Ethiopia, South Sudan, Sudan, and Northern Nigeria (Chuma-Okoro & Oluwasemilore 2022). Additionally, 129 million people in 32 African countries were in stressed situations regarding food security (Rocca & Schultes 2020:1). There are indications that the number of people facing hunger and food insecurity are increasing in Africa. This is stemming from the fact that Africa is riddled by so many challenges and of late has been exposed to “issues such as the Covid-19 pandemic, economic woes, conflict, drought and extreme weather conditions” (World Vision, in Hlongwane & Vyas-Doorgapersad 2023:36). Additionally, it is recorded that an estimated 55.7 million people live in food insecurity in twelve SADC member states (SADC Synthesis Report 2022:9). For the 2021-2022 season, it was anticipated that 50.8 million people from the same nations were food insecure at the same time (SADC Synthesis Report 2022:9). Of the twelve member states that submitted reports, 72% of the population experiencing food insecurity is found in the Democratic Republic of Congo (DRC), home to 25.9 million people. The population of food insecure people in the region is around 93%, with the caseloads in Malawi (3.8 million), Zimbabwe (3.8 million), Madagascar (2.1 million), and Angola (1.6 million) combined (SADC Synthesis Report 2022:9; also refer ReliefWeb 2022).

The obtaining situation did not spur even the well to do economies such as South Africa. It is given that an already fragile economy entered a period of economic turmoil on March 27, 2020, when Coronavirus pandemic arrived in South Africa and the lockdown was enforced (Van der Berg, Patel & Bridgman 2022:724-725). This unleashed household hunger, food insecurity, and poverty which soared, with dismal results for the kids who live with this reality (Van der Berg et. al. 2022:724-725). Whilst South Africa entered into a recession due to the pandemic, Kenya was also not spurred. This situation was further undermined by the natural calamities not linked to human health. Insects and weed seeds migrating into SSA due to rising temperatures and water levels also added another burden. 1.25 million hectares of land were impacted by the locust infestations in 2019-20 in Ethiopia, Kenya, and Somalia; as a result, the region’s financial needs increased by almost \$70 million (Baptista et al. 2022:2). Elsewhere, the Horn of Africa’s current drought has already claimed the lives of almost 1.5 million animals and significantly reduced cereal production (Baptista et al. 2022:2). Even for the available food, it is noted that the nutrients have been severed by the obtaining circumstances. Indeed, low protein content is being attributed to the disrupted grain development caused by rising temperatures, Carbon dioxide (CO₂) emissions, and toxin levels. For instance, it has been shown that the edible

portions of important staples (such as wheat, rice, and potatoes) decline by 10 to 14 percent based on cereal results across varying growing seasons (Baptista et al. 2022:2). The level of food and nutrition insecurity in the SADC region also remains unacceptable, and there does not seem to be enough being done to help the region become more resilient to the shocks that it experiences on a regular basis (SADC 2022:26). This reveals that a combination of anthropogenic and natural factors continues to undermine efforts to eradicate hunger in Africa. All these factors discussed in this section are responsible for causing challenges to realise SDG 2 in Africa, further discussed below.

Challenges related to non-achievement of SDG2 in Africa

A host of factors are impeding Africa to not realise its SDG2 targets (Otekunrin 2021:1). The primary contributory factor that SSA facing related to food insecurity is due to a lack of resistance to climate change. This will continue to dent the aspirations to end hunger in the region and without climate-proving measures, food insecurity will remain high. Reducing the population's susceptibility to shocks in food prices and supply, whether they are caused by climate change or something else entirely, like the indirect consequences of the ongoing conflict in Ukraine, requires addressing this challenge, primarily through more robust food production and distribution within SSA (Baptista et al. 2022:9). The challenges are both internal and external. It is noted that SSA countries were left indebted and without economic assets to pay off their debts due to inappropriate financing by the World Bank. Countries were obliged to reduce their spending on housing, health care, education, and agriculture through structural adjustment policies (SAPs), which also made it possible for private foreign investment to take the resources that supported the livelihoods of local residents (Bjornlund et.al. 2022:857). Elsewhere, Southern Africa has been identified by the Intergovernmental Panel on Climate Change (IPCC) as a climate "hotspot" due to its susceptibility to frequent extreme weather events, such as droughts and flooding (SADC 2022:17). The nations bordering the Southwest Indian Ocean (SWIO) are especially susceptible to cyclones. During the 2021/22 rainy season, five tropical storms or cyclones made landfall in these nations. Many areas of the region have seen repeated droughts during the last five years (SADC 2022:17). It is against such a background that achieving the SDG2 targets may remain largely elusive. Others have summarised the food insecurity predicament faced by the region as springing from climate change, natural catastrophes, violence, income inequality, a lack of farming skills, land grabs (De Wet Billings 2023:2).

There are various factors or reasons for the non-realisation of SDG2. The challenges include high rates of "poverty, unemployment, social exclusion, kidnapping, terrorism, corruption, banditry, and confrontations" (Otekunrin 2021:1). Hunger is primarily caused by several factors, including weak states and governance, war and conflict, rising income inequality, deteriorating financial and economic development, environmental degradation and climate change, biodegradation, and most recently, the Covid 19 pandemic (refer to Atukunda et.al. 2021:1). It is noted that acute food emergencies in Africa are still mostly caused by conflict. The Africa Centre for Strategic Studies (2021:1) documents that over a hundred thousand people are being impacted by famine in areas of Joglei, Warrap States, and Northern Bahr Ghazal, South Sudan. Additionally, it is recorded that, in the following hunger hotspots: Chad, Burkina Faso and Mali, the Democratic Republic of the Congo, Ethiopia, Haiti, the Niger, Somalia, South Sudan, the Sudan, and Yemen (WFP and FAO 2023:3), organised violence and armed conflict continue to be major contributors to acute food insecurity. However, the main causes of an anticipated worsening of acute food insecurity over the outlook period are high costs of staple goods and the effects of Cyclone Freddy (WFP and FAO 2023:3). It is imperative to note that when Cyclone Freddy made landfall in March 2023, it caused losses and damages to the agriculture sector alone of USD 110 million (WFP and FAO 2023:26). Droughts in southern Africa, locust surges in East Africa, and floods in Sudan and South Sudan were a few of the disruptive climate related occurrences that made millions of people more food insecure. In 2020, Sudan saw the greatest flooding in a century and the worst locust infestation in decades, which also impacted Kenya, Somalia, Eritrea, and Djibouti. An additional 3.5 million people in Sudan experienced acute food insecurity (Africa Centre for Strategic Studies 2021:2). Achieving the targets for SDG2 may be compromised because crop damage and livestock mortality caused large-scale economic losses, which exacerbated poverty and might have long-term effects on the impacted population's nutrition (WFP and FAO 2023:26). Food insecurity has been compounded by the fact that productivity was affected even for the upcoming seasons with the damage caused to the irrigation systems. Accompanying such cyclones were outbreaks of water borne diseases such as cholera which worsened the malnutrition in the affected areas.

There is evidence that inadequate food supply in SSA is a result of low yields and production. This is compounded by the antiquated equipment, a lack of infrastructure investment and support for smallholder farmers, and governmental policies (Beyene 2023:16). Furthermore, although food is accessible, it is not distributed equitably based on each person's needs. More so, a lack of well-balanced diet contributes to poor nutrition, insufficient access to food, and chronic illnesses (Beyene 2023:16). With poverty being a main problem in many of these nations, it is hard for the populace to afford wholesome food which also undermines the potential to meet the SDG2 targets. The combination

of these problems makes people more susceptible to illnesses associated with malnutrition, which lowers life expectancy rates (Beyene 2023:16). Years of governmental mismanagement caused hyperinflation and currency depreciation spikes in Zimbabwe, Sudan, and South Sudan, which exacerbated the country's already high levels of food insecurity. Zimbabwean households saw income reductions of more than 50% in 2020 when Covid-19 preventive measures were combined with them (Africa Centre for Strategic Studies 2021:2). It is also added by Vyas-Doorgapersad, Shava and Olowu (2023:68) that one obstacle that has been identified as potentially impeding African nations' efforts to achieve food security in the wake of COVID-19 is inflation. Food security is at risk because Zimbabwe is going through the worst inflation in Africa. For example, low local market prices and a lack of agricultural input and equipment to support smallholders and commercial farming are making agriculture less profitable. Rising prices have a negative impact on many citizens, making it impossible for the government to fight hunger on its own in many provinces. As a result, stakeholders may need to step in to stop the gap from getting wider. Vyas-Doorgapersad et.al. (2023:68) further stated examples to rationalise the statement and emphasised that the economy of South Africa has been overwhelming, as prices for goods have increased after the events in Ukraine, which many have linked to an increase in oil prices. In addition, political corruption exists in Nigeria, which undermines food security packs intended for relief efforts during COVID-19. It is further noted by Delgado et.al. (2023:2) that Africa bears a disproportionate amount of the cost of climate change and is most susceptible to climate change, according to a 2017 United Nations Environment Programme (UNEP) report.

The study synthesises that achieving sustainable development and national food security requires boosting the production of staple foods considering the current global crisis. Reducing hunger, enhancing health, and stimulating the economy all depend on ensuring food security. Sustainable agricultural production and the provision of economic welfare for society are necessary for achieving both environmental sustainability and global food security, suggested by Gyimah, Saalidong and Nibonmua (2023). A better understanding of the regulating variables mediating food security for sustainable development is necessary for the implementation of significant policies that will be necessary to end food insecurity, poverty, and manage natural resources, concludes Gyimah (et.al. 2023).

Conclusion

The study suggests a need for collaborative measures to deal with the challenge of food insecurity and to achieve SDG2 effectively. Various ministries in country-context may work together to find feasible solutions related to food security. Some of the suggestions for consideration are stated as conclusions. The Ministry of Agriculture may implement sustainable farming practices, which entail reducing the use of chemical fertilizers and increasing crop exposure to sunlight to produce food products that are pesticide-free and therefore regarded as organic. To educate farmers about the benefits and procedures of organic farming, the Ministry must arrange workshops in the relevant provinces and municipalities with the assistance of Departments and Directorates. This could improve the nutritional value of food items and enhance the health and wellbeing of households. Stakeholders with forestry and agricultural expertise may be asked to give talks on official platforms to advise farmers on organic food crop production. The Ministry of Health may also participate in food security programmes by providing dieticians and nutritional specialists to conduct workshops and educate households on the selection and preparation of nutrient-dense food. When the information is interpreted with understanding, the effect can be seen and could benefit the community. This arrangement will be thoroughly investigated and included in upcoming publications as it is also connected to SDG 3, which addresses nutrition and wellness. Talks about opening borders for free import and export of food commodities may be initiated at the regional level by the Ministry of Trade. Natural resource wealth abounds in African nations, and free trade agreements could help cost-effective food shopping for households across the continent. Due to households' potential ability to provide food for their families, food security may benefit from the affordability of food purchases. The Ministry of Education may provide bursaries and agricultural programs to encourage young people to pursue careers in forestry and agriculture. In addition to potentially improving job and self-employment prospects, this could also have a positive effect on food security by enabling owners to purchase food for their families with the help of revenue from agricultural projects. Budgetary resources for projects centered on forestry and agriculture may be granted by the Ministry of Finance to municipal and provincial administrations. The Ministry of Agriculture and Education may use the funds to offer study or project launch opportunities to qualified applicants. For households where English is not a first language, the Ministry of Social Development can send out community development workers to translate information in local and regional languages. The Ministry of Land and Infrastructure may provide land to establish local marketplaces where farmers and independent contractors can sell their goods in an inexpensive manner and make enough money to meet their living expenses. The Ministry of Communications could help by setting up channels for telecasting and broadcasting agricultural and forestry-related content. Information about updated farming techniques, the nutritional advantages of organic farming, and sustainable food consumption can be

disseminated to farmers, educators, households, and entrepreneurs in remote urban and rural areas using information and communication technologies (ICTs), e-government arrangements, and fourth industrial revolution (4IR) measures.

The study attempts to make contributions to the public policy and public management fields. The rationale is that the problems and recommendations are related to public policymaking on food security and government agencies. Policymakers may find it easier to develop appropriate policies, programs, and projects for improving food security if they have a better understanding of the problems and how cooperative solutions can be found. These recommendations might help nations accomplish SDG 2 successfully and economically. However, there are limitations to the study. Conducting interviews to obtain primary data for the study was not feasible due to the extensive nature of the subject matter. The upcoming publications will also be based on desktop research, wherein the current state of SDG 2 will be examined through a comparative analysis of food security interventions in selected African countries.

References

- [1] Africa Center for Strategic Studies (2021). Food Insecurity Crisis Mounting in Africa. February 16, 2021. Available from: <https://africacenter.org/spotlight/food-insecurity-crisis-mounting-africa/> (Accessed 12 March 2024).
- [2] Africa Centre for Strategic Studies. (2023). Unresolved Conflicts Continue to Drive Africa's Food Crisis. Available from: <https://africacenter.org/spotlight/unresolved-conflicts-continue-to-drive-africas-food-crisis/> (Accessed 12 March 2024).
- [3] Antwi, S.K. and Hamza, K. (2015). Qualitative and Quantitative Research Paradigms in Business Research: A Philosophical Reflection. *European Journal of Business and Management*, 7(3), 217-218.
- [4] Atukunda, P, Eide, W.B, Kardel, K.R, Iversen, P.O, Westerberg, A.C. (2021). Unlocking the potential for achievement of the UN Sustainable Development Goal 2 - 'Zero Hunger' - in Africa: targets, strategies, synergies and challenges. *Food Nutrition Research*, 65. doi: 10.29219/fnr.v65.7686.
- [5] Baptista, D, Farid, M, Fayad, D, Kemo, L, Lanci, L, Mitra, P, Muehlschlegel, T, Okou, C, Spray, J, Tuitoek, C and Unsal, F. (2022). *Climate Change and Chronic Food Insecurity in Sub-Saharan Africa*. Washington, DC: IMF.
- [6] Bedasa, Y and Deksisa, K. (2024). Food insecurity in East Africa: An integrated strategy to address climate change impact and violence conflict. *Journal of Agriculture and Food Research*, 15 (1), 100978. Pp 1-11. Available from: <https://www.sciencedirect.com/science/article/pii/S2666154324000152> (Accessed 14 January 2024).
- [7] Beyene, S.D. (2023). The impact of food insecurity on health outcomes: empirical evidence from sub-Saharan African countries. *BMC Public Health*, 23:338,1-22. <https://doi.org/10.1186/s12889-023-15244-3>.
- [8] Bjornlund, V, Bjornlund, H and Van Rooyen, A. (2022). Why food insecurity persists in sub-Saharan Africa: A review of existing evidence. *Food Security*, 14,845–864. <https://doi.org/10.1007/s12571-022-01256-1>.
- [9] Chuma-Okoro, H. and Oluwasemilore, I.A. (2022). Intellectual property rights, agricultural biotechnology and food sufficiency: strengthening the Nigerian intellectual property legal framework for food self-sufficiency in the aftermath of a global pandemic. *International Review of Law, Computers & Technology*, 36 (1), 48-67. <https://doi.org/10.1080/13600869.2021.1997082>
- [10] Delgado, C, Tschunkert, K and Smith, D. (2023). Food Insecurity in Africa: Drivers and Solutions. SIPRI research policy paper. Available from: https://www.sipri.org/sites/default/files/2023-01/2301_sipri_rpp_food_insecurity_in_africa_0.pdf (Accessed 23 March 2024).
- [11] De Wet-Billings, N. (2023). Perpetuation of household food insecurity during COVID-19 in South Africa. *Journal of Health, Population and Nutrition*, 42: 96, 1-8. <https://doi.org/10.1186/s41043-023-00441-y>.
- [12] Femine Early Warning Systems Network (FEWS NET). (2024). What is IPC? Available from: <https://fewsn.net/about/integrated-phase-classification#>(Accessed 12 May 2024).
- [13] Food and Agriculture Organisation (FAO) (2023). Suite of Food Security Indicators. In: FAOSTAT. Rome. Available from: <https://www.fao.org/faostat/en/#data/FS> (Accessed 12 May 2024).
- [14] Food and Agriculture Organisation (FAO), African Union Commission (AUC), Economic Commission for Africa (ECA) and World Food Programme (WFP). (2023). Africa – Regional Overview of Food Security and Nutrition 2023: Statistics and trends. Accra, FAO. Available from: <https://doi.org/10.4060/cc8743en> (Accessed 12 May 2024).
- [15] Frey, B.B. (2018). Document Analysis. Available from: <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i7603.xml> (Accessed 15 January 2022).
- [16] Galal, S. 2023. Food security index in Sub-Saharan Africa 2022, by country. Available from: <https://www.statista.com/statistics/1410700/food-security-index-in-sub-saharan-africa-by-country/> (Accessed 14 May 2024).

- [17] Gyimah, J., Saalidong, B.M. and Nibonmua, L.K.M. (2023). The battle to achieve Sustainable Development Goal Two: The role of environmental sustainability and government institutions. *PLoS ONE*, 18(9): e0291310. <https://doi.org/10.1371/journal.pone.0291310>
- [18] Hlongwane, N.H. (2023). *Food security interventions to achieve Sustainable Development Goal Two in South Africa*. Unpublished MA minor dissertation. Johannesburg: University of Johannesburg.
- [19] Hlongwane, N.H and Vyas-Doorgapersad, S. (2023). Food security interventions to achieve Sustainable Development Goal Two in South Africa. *OIDA International Journal of Sustainable Development*, 16 (2),35-46.
- [20] Jansen, D. (2024). *Factors influencing the implementation of gender equality in Newcastle Local Municipality*. Unpublished PhD Thesis. Johannesburg: University of Johannesburg.
- [21] Kutlu, K. (2016). Food Security and Drawbacks of Neo-Liberal Food Policies. *Florya Chronicles of Political Economy*, 2 (2), 1-17.
- [22] Machi, L. and McEvoy, B. (2012). *The Literature Review: Six Steps to Success* (2nd ed). CA: Corwin: Thousand Oaks.
- [23] Mahlatsi, K. (2021). Achieving Sustainable Development Goals (SDGs) In Africa. *The Thinker*. Johannesburg: UJ Press Journals. Available from: <https://journals.uj.ac.za> (Accessed 15 May 2024).
- [24] Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*. SAGE Publications. Available from: <https://www.amazon.com/Qualitative-Research-Design-Interactive-Approach/dp/1412981190> (Accessed 15 September 2022).
- [25] Mutandwa, H. (2022). *Urban water infrastructure development in Zimbabwe: The role of public private partnerships*. Unpublished PhD Thesis. Johannesburg: University of Johannesburg.
- [26] Mutenga, M. (2020). *The determinants of Zimbabwe's economic policies on socio-economic development:1980-2015*. Unpublished PhD Thesis. Johannesburg: University of Johannesburg.
- [27] Nyikadzino, T. & Vyas-Doorgapersad, S. (2020). The devolution of governmental powers and responsibilities in post-independent Zimbabwe. *African Renaissance*, 17(1), 233–251. <https://doi.org/10.31920/2516-5305/2020/17n1a11>
- [28] Otekunrin O. A. (2021). Is Africa Ready for the SDG 2 (Zero Hunger) Target by 2030? *Current Agriculture Research*, 9 (1), 1-3. doi : <http://dx.doi.org/10.12944/CARJ.9.1.01>.
- [29] ReliefWeb. (2022). Synthesis Report on the state of food and nutrition security and vulnerability in Southern Africa 2022. Available from: <https://reliefweb.int/report/angola/synthesis-report-state-food-and-nutrition-security-and-vulnerability-southern-africa-2022-enpt> (Accessed 19 January 2024).
- [30] Rocca, C and Schultes, I (2020). Food Insecurity in Africa: Deadlier than Covid-19? Mo Ibrahim Foundation. Available from: https://mo.ibrahim.foundation/sites/default/files/2020-05/food-insecurity-in-africa_0.pdf (Accessed 16 March 2024).
- [31] Sasu, D.D. (2023). Severe food insecurity in African sub-regions 2014-2022. Available from: Africa: severe food insecurity by sub-region | Statista (Accessed 14 May 2024).
- [32] Soga, B. (2022). *A comparative analysis of the use of e-government services by small businesses*. Unpublished PhD Thesis. Johannesburg: University of Johannesburg.
- [33] South Africa's Implementation Of the 2030 Agenda for Sustainable Development "Solving Complex Challenges Together" Voluntary National Review (Vnr) Report 2019. Available from: https://sustainabledevelopment.un.org/content/documents/23402SOUTH_AFRICA_RSA_Voluntary_National_Review_Report_Final_14_June_2019.pdf (Accessed 15 February 2024).
- [34] Southern African Development Community (SADC). (2022). Synthesis Report on the state of food and nutrition security and vulnerability in Southern Africa. Regional Vulnerability Assessment & Analysis Programme (RVAA), Informing Resilient Livelihoods. Available from: https://www.sadc.int/sites/default/files/2022-08/SADC_RVAA_Synthesis_Report_2022-ENG.pdf (Accessed 19 January 2024).
- [35] Statista. (2024). Poverty, inequality, and wealth in Africa. Available from: <https://www.statista.com/statistics/1410700/food-security-index-in-sub-saharan-africa-by-country/> (Accessed 14 May 2024).
- [36] Subramaniam, M. and Bunka, C. (n.d.). Food Security and State: Policy Considerations for the Contemporary Food Crisis. Available from: <https://docs.lib.purdue.edu/cgi/viewcontent> (Accessed 15 May 2024).
- [37] Van der Berg, S, Patel, L and Bridgman, G. (2022) Food insecurity in South Africa: Evidence from NIDS-CRAM wave 5. *Development Southern Africa*, 39: (5),722-737. <https://DOI: 10.1080/0376835X.2022.2062299>.
- [38] Vyas-Doorgapersad, S. (2022a). The role of BRICS in global governance to promote economic development. *Africa's Public Service Delivery and Performance Review*, 10(1), a633. <https://doi.org/10.4102/apsdpr.v10i1.633>
- [39] Vyas-Doorgapersad, S. (2022b). The Use of Digitalization (ICTs) in Achieving Sustainable Development Goals. *Global Journal of Emerging Market Economies*, 14(2), 265–278. DOI: 10.1177/09749101211067295

[40] Vyas-Doorgapersad, S, Shava, E. & Olowu, A. (2023). Food security and nutrition governance post-Covid-19 in Africa. *Insights into Regional Development*, 5(3), 58-72. [http://doi.org/10.9770/IRD.2023.5.3\(3\)](http://doi.org/10.9770/IRD.2023.5.3(3)).

[41] Wallerstein, I. (1974). *The Modern World System One Capitalist Agriculture and The Origins of European World Economy*. New York: Academia.

[42] WFP and FAO. (2023). Hunger Hotspots. FAO–WFP early warnings on acute food insecurity: November 2023 to April 2024 Outlook. Rome. <https://doi.org/10.4060/cc8419en>

[43] World Bank (2024). Newsletter. Available from: [https://www.worldbank.org/en/topic/agriculture/brief/food-security-](https://www.worldbank.org/en/topic/agriculture/brief/food-security-update?cid=ECR_GA_worldbank_EN_EXTP_search&s_kwcid=AL%2118468%213%21665425039345%21b%21%21g%21%21food%20insecurity&gad_source=1&gclid=CjwKCAiA_tuuBhAUEiwAvxkgTmdhPU_Ck4IA21Yq_r3XX84prtUHD0l7hIhuieBkr0rZLScBCRBsBB0C0xIQAvD_BwE)

update?cid=ECR_GA_worldbank_EN_EXTP_search&s_kwcid=AL%2118468%213%21665425039345%21b%21%21g%21%21food%20insecurity&gad_source=1&gclid=CjwKCAiA_tuuBhAUEiwAvxkgTmdhPU_Ck4IA21Yq_r3XX84prtUHD0l7hIhuieBkr0rZLScBCRBsBB0C0xIQAvD_BwE (Accessed 09 April 2024).

About the author

Shikha VYAS-DOORGAPERSAD is appointed as a Full Professor, School of Public Management, Governance and Public Policy at University of Johannesburg, South Africa. Her previous lecturing experience includes International College for Girls (India); University of Zululand, and North-West University (South Africa). She holds degrees of M.A., M.Phil., and Ph.D. in Public Administration from the University of Rajasthan (India). Her research interests are in Public Policy, Gender Issues, and in Municipal Governance. She has presented research findings at international conferences worldwide. She has authored two books (University Book House, Jain Prakhana Mandir [Publishers in India]), Editor of three books (Taylor and Francis, Routledge [Publishers in New York]); contributed chapters in books and have published articles in national and international accredited journals. She serves as Editor-in-Chief, Guest Editor, Associate Editor, Editorial Board Member, and reviewer to South African and international journals. She is a member of the International Advisory Board and International Scientific Committees to various conferences world-wide. She is serving as an Adjunct Research Professor in the School of Business and Management of Uganda Technology and Management University. She is appointed as a Visiting Professor at the Riara School of Business, Riara University in Kenya. She serves as External Moderator/Examiner for MAs and PhDs for several universities in South Africa. She has published more than 100 articles in scientific journals.

Mailing address: School of Public Management, Governance and Public Policy, College of Business and Economics, University of Johannesburg, C-407, Auckland Park Campus, Johannesburg, South Africa

Tel: +27 11 559 4720

Cell: + 72 463 8685

Email: svyas-doorgapersad@uj.ac.za

