

The State of Food Insecurity: A comparative study of Sub-Saharan Africa and North Africa during the period 2020–2023

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Abstract--- This study aims to determine the level of food insecurity in both Sub-Saharan Africa and North Africa by examining indicators such as undernourishment, the prevalence of food insecurity, and the affordability of a healthy diet, in addition to regional progress toward global nutrition targets. Through data analysis, the study found that Sub-Saharan Africa records high levels across all studied indicators, resulting in a severe degree of food insecurity. This is attributed to regional instability from wars and environmental changes. In contrast, North Africa's food insecurity levels fluctuated during the study period, influenced by the consequences of conflicts in neighboring countries, particularly illicit migration and its related effects.

Keywords--- Undernourishment, Food Insecurity, Healthy Diet, North Africa, Sub-Saharan Africa.

Introduction

Food insecurity is a pressing concern for all nations, particularly developing ones, as it affects large segments of society. It is characterized by a lack of basic nutrition, the inability to afford a healthy diet, and can even lead to starvation. This issue is exacerbated by global crises, from climate change to wars and political and economic instability, which directly impact all stages of agricultural food production and impede the ability to provide and access safe and healthy food.

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Sub-Saharan Africa is a region composed of countries suffering from extreme poverty, famine, and deprivation. These conditions are driven by wars, the spread of terrorist groups, and climate change effects like droughts and hurricanes, which directly damage crops—the region's primary food source—leading to production losses and an inability to meet demand. North Africa is also highly vulnerable due to the structural dependency of its constituent countries on food imports, alongside other factors affecting domestic food production.

From this standpoint, we pose the following research question:

To what extent was food insecurity severe in both Sub-Saharan Africa and North Africa during the period from 2020 to 2023?

The main question can be divided into the following sub-questions:

- What is the level of undernourishment in Sub-Saharan Africa and North Africa?
- Can the populations in North Africa and Sub-Saharan Africa afford a healthy diet?
- What are the levels of progress toward global nutrition targets in Sub-Saharan Africa and North Africa?
- What are the prevalence rates of food insecurity in North Africa and Sub-Saharan Africa?

To answer the research question, we propose the following hypothesis:

- The crises in Sub-Saharan Africa and their repercussions on North Africa led to an increased degree of food insecurity in both regions.
- The period 2020–2023 witnessed a general deterioration in food security in both Sub-Saharan Africa and North Africa due to the impacts of the COVID-19 pandemic, the war in Ukraine, and climate change.

Therefore, this study aims to identify the key indicators for measuring food insecurity and their levels in both Sub-Saharan Africa and North Africa from 2020 to 2023. It also seeks to understand the underlying causes and propose solutions to reduce food insecurity and move

Methodology and Structure

Study Methodology: To achieve the study's objectives, a descriptive-analytical method was employed to examine the indicators of food insecurity and analyze data from specialized reports issued by international organizations. Additionally, a comparative method was used to compare the evolution of each indicator over the three-year period from 2020 to 2023 in both Sub-Saharan Africa and North Africa.

Study Structure: To address the research question and verify the hypothesis, this study is divided into four main sections. The first section covers undernourishment in Sub-Saharan Africa and North Africa. The second addresses the affordability of a healthy diet in both regions. The third section examines the regional progress toward global nutrition targets. Finally, the fourth section details the prevalence of moderate or severe food insecurity in both regions.

I. Undernourishment in Sub-Saharan Africa and North Africa

The prevalence of undernourishment indicates the extent of hunger in a specific area¹, defined as insufficient food intake relative to individuals' dietary needs, or the body's inability to utilize food for various reasons². The following data illustrates the prevalence and number of undernourished individuals in North Africa and Sub-Saharan Africa.

¹ Otekunrin, Olutosin Ademola, "Assessing the Prevalence and Severity of Global Hunger and Food Insecurity: Recent Dynamics and Sub-Saharan Africa's Burden", *Sustainability*, vol 16, no 12, 2024, p04.

² Sonia Yeghazaryan, "Iraq in Global Hunger Indicators," *Journal of Economics and Development*, Vol. 12, No. 1, 2024, pp. 27-28.

Figure No. (01) shows the prevalence of malnutrition, and Table No. (01) and Figure No. (02) show the number of malnourished people in both regions, as follows:

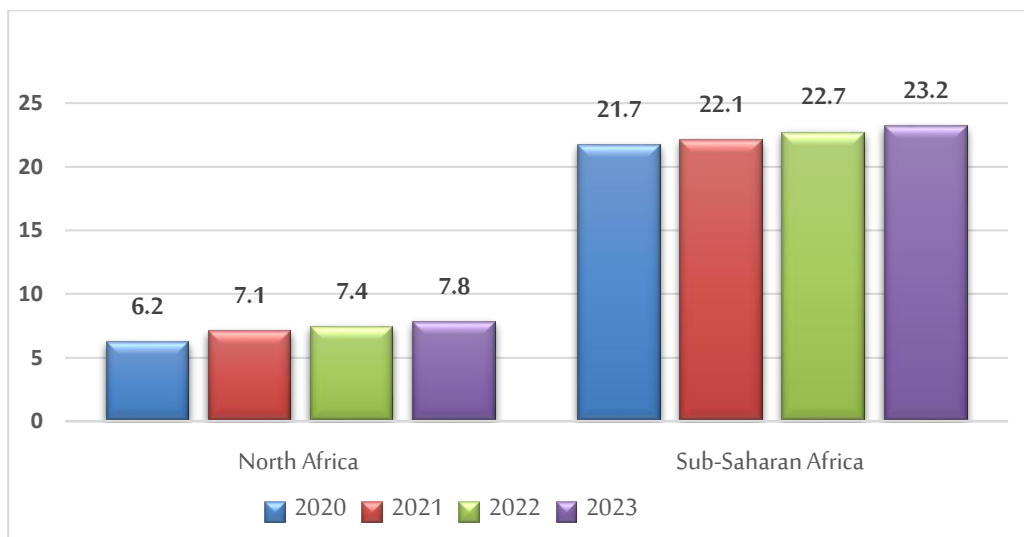


Figure (01): Prevalence of malnutrition during the period 2020-2023.

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 7.

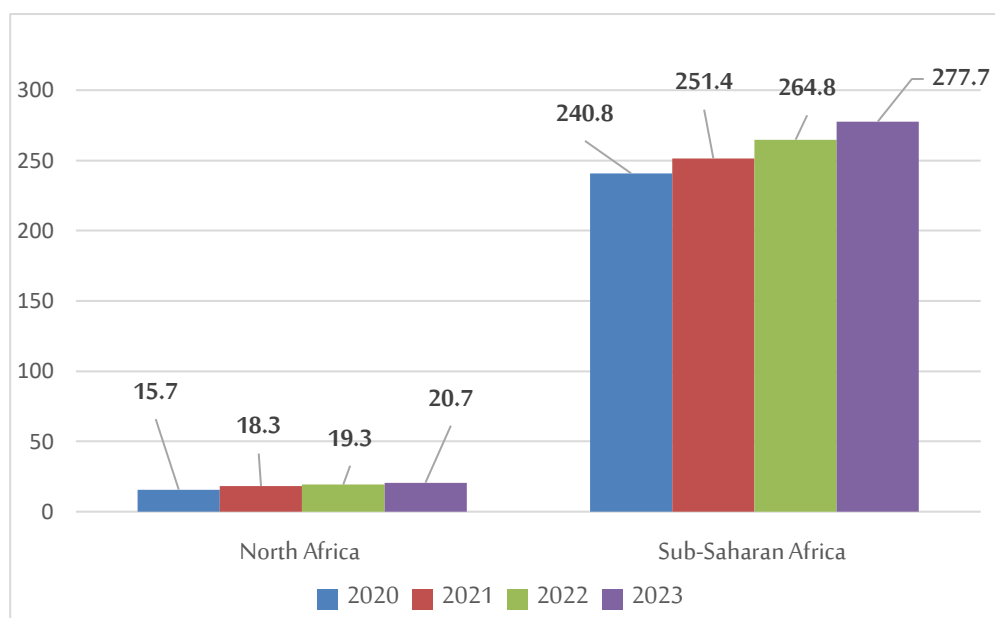
The analysis of (Figure 01) data reveals that the percentage related to malnutrition in North Africa has been continuously increasing since 2020, as a percentage of 6.20% was recorded in 2020, then it rose to record an additional percentage of 0.90% in 2021 and stabilized at 7.10%, and in 2022 it reached 7.40%, an increase of 0.30% compared to the previous year, while in 2023 it rose to reach 7.80%, an increase of 1.60% compared to 2020. This is due to the fact that the period studied was during the Corona pandemic, in addition to the trend towards strengthening and reforming the health sector, in addition to the fear of farmers and investors from the pandemic, which led to their distancing from the agricultural and farming sector, which led to a decrease in production, and the loss of others their source of income, which led to their inability to provide food, in addition to the fact that some countries worked to suspend the export of basic food products.

As for Sub-Saharan Africa, we find a high rate of malnutrition during the period shown in the figure above. In addition, it did not stabilize or decrease in some stages, but rather continued to rise, reaching its peak in 2023 compared to 2020, where a rate of 21.70% was recorded in 2020 as the prevalence of malnutrition, and with an increase of 0.40%, a rate of 22.10% was recorded in 2021, then rose to 22.70% in 2022, until the highest rate was recorded in 2023, which reached 23.2%, a difference of 1.50% compared to 2020. This is due to crises starting with the Corona pandemic, in addition to the conflicts occurring in the region, the ongoing wars, and the spread of armed groups.

Table (01): Number of malnourished people during the period 2020-2023

Region	2020	2021	2022	2023
North Africa	15.7	18.3	19.3	20.7
Sub-Saharan Africa	240.8	251.4	264.8	277.7

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 8.

**Figure (02):** Number of malnourished people during the period 2020-2023

Source: Excel output based on data 01

For context, Sub-Saharan Africa has a land area of approximately 24.3 million km². and as for the population, it was about 1.14 billion people in 2020, and rose to 1.17 billion people in 2021, and in 2022 it reached about 1.21 billion people, and a population of 1.24 billion people was recorded in 2023. As for North Africa, its area reached about 8.60 million km², and its population in 2020 reached about 250 million people, and in 2021 it reached 260 million people, and in 2022 it reached 267 million people, to be recorded about 273 million people in 2023³. Thus, the Sub-Saharan Africa is experiencing rapid population growth due to high fertility and relatively low mortality rates, while North Africa has a more stable population growth rate. It is also worth noting that North Africa's area represents approximately 35.4% of Sub-Saharan Africa's area, while its population represents approximately 22% of its total population.

Accordingly, it is clear from Table (01) and Figure (02) above that the number of malnourished people in North Africa is increasing during the period 2020-2023, as the number of malnourished people was

³ Population, total - Sub-Saharan Africa: World bank group, 2023, https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ZG&fbclid=IwY2xjawHFG65leHRuA2FlbQIxMAABH1jBA0i4BILh44zqUtYp7jjZDTHpD0yNFxBQxn6Ixx5TMkbpPXXUSUcw_aem_aS0MWkhPC2gJxBG_H0vJAhttps://20-04-2025, 12:23h.

recorded at 15.7 million people in 2020, then it increased by about 2.6 million people in 2021 to reach 18.3 million people, after which the number increased in 2022 to record approximately 19.3 million malnourished people, an increase of one million people compared to last year, while in 2023, about 20.70 million malnourished people were recorded, approximately 5 million people more than in 2020.

In sub-Saharan Africa, 240.8 million people were undernourished in 2020, and the number is expected to reach 277.7 million in 2023, an increase of 36.9 million people. This is after 251.4 million and 264.8 million undernourished people were recorded in 2021 and 2022, respectively. This indicates a lack of efforts to improve nutrition in the region, a result of the conflicts and instability that the region is experiencing.

The persistent rise in malnutrition is primarily due to regional instability, long-standing poverty, a lack of interest in food production, and a fragile economy that is unable to provide the hard currency needed to import the basic food items needed to meet people's needs.

II. The Healthy Diet in Sub-Saharan Africa and North Africa

Eating habits are the result of repetitive and somewhat conscious collective behavior that drives individuals to choose, prepare, consume, and use certain food⁴. Diets encompass all cultural differences, traditional dietary patterns, and individual preferences. Diets are defined as those with a low environmental impact that contribute to food and nutritional security and a healthy life⁵. The percentage of the population unable to afford a healthy diet, as well as the average cost of a healthy diet during the period 2020-2023 in both North Africa and Sub-Saharan Africa, is as follows:

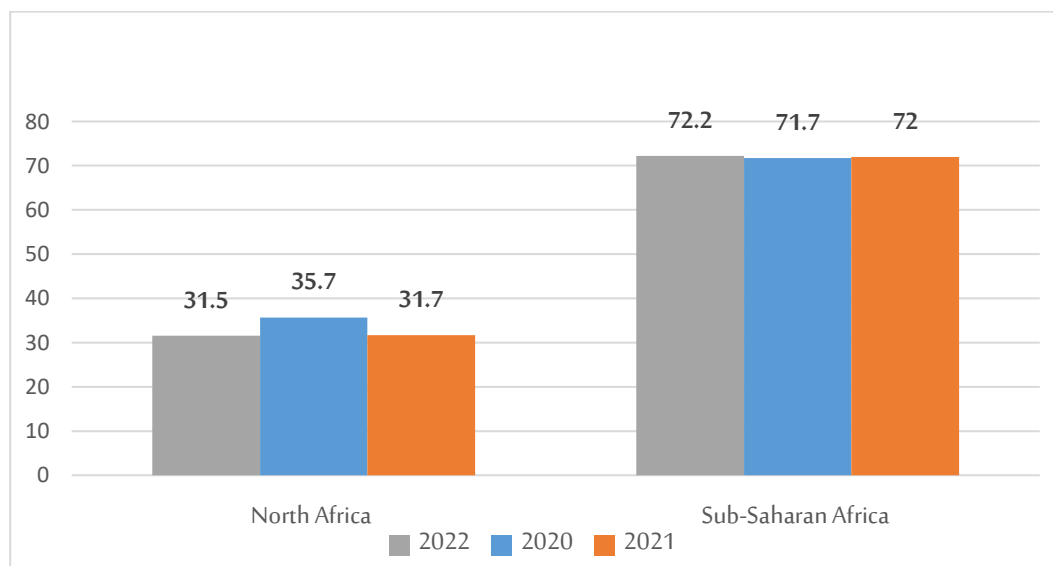
Table (02): Rate of population unable to afford a healthy diet 2020-2022

Region	2020	2021	2022
North Africa	35.7	31.7	31.5
Sub-Saharan Africa	71.7	72.0	72.2

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 29

⁴ Fisberg Mauro; Nathalia Gioia; Priscila Maximino, "Transgenerational transmission of eating habits", *Jornal de Pediatria*, vol 100, no 01, 2024, p 582.

⁵ Harry Amelia J.; Carol J Boushey; Christina M Pollard; Satvinder S Dhaliwal; Syed Aqif Mukhtar; Edward J Delp; Deborah A Kerr, "Healthy and Sustainable Diet Index: Development, Application and Evaluation Using Image-Based Food Records", *Nutrients*, vol 14, no 18, 2022, p02.



Source: Excel output based on data 02

The table and figure above show the percentage of the population that cannot afford a healthy diet. We note that the percentage of the population in North Africa in 2020 reached 35.7%, then this percentage declined in the following year by about 4%, with a rate of 31.7% recorded in 2021. As for 2022, a rate of 31.5% was recorded, meaning a decline of about 4.2% compared to 2020, indicating the interest in this issue by governments in the region.

As for sub-Saharan Africa, very high rates were recorded during this period, with 71.7% in 2020, 72% in 2021, and 72.2% in 2022. This means that the percentage of the population unable to provide a healthy diet is increasing, in addition to the very large population size, which indicates the worsening crisis in this region and the inability of governments to provide incomes for the population to afford a healthy diet.

Table (03): Average cost of a healthy diet 2020-2023 (dollars)

Region	2020	2021	2022
North Africa	3.42	3.44	3.78
Sub-Saharan Africa	3.15	3.41	3.73

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 25

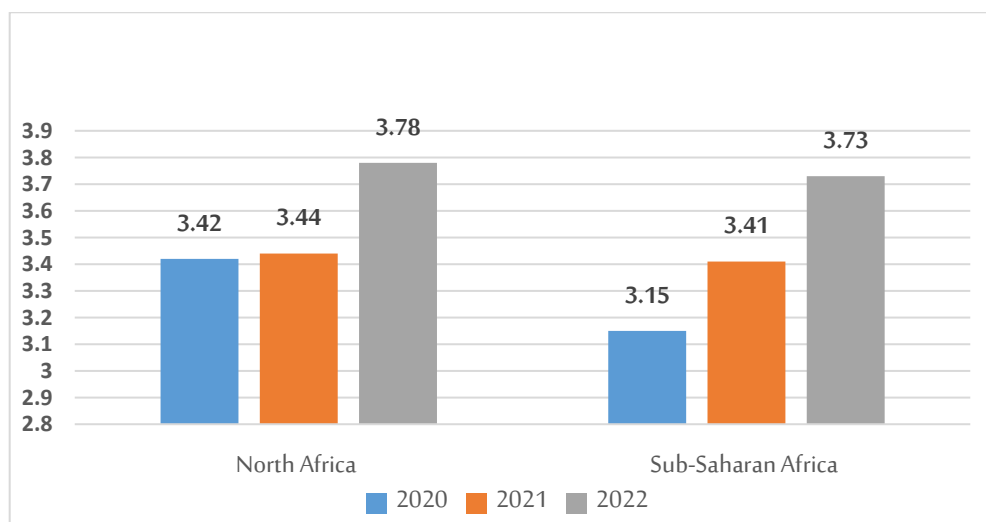


Figure (04): Average cost of a healthy diet 2020-2023 (dollars)

Source: Excel output based on data 03

The table and figure above show that the average cost of a healthy diet in North Africa during the period under study was approximately \$3.42 in 2020, \$3.44 in 2021, and \$3.78 in 2022. This indicates a slight improvement in purchasing power in the region compared to 2020. In sub-Saharan Africa, the average cost of a healthy diet has seen a slight but steady increase over the period under study, reaching \$3.15 in 2020, \$3.41 in 2021, and \$3.73 in 2022. This indicates a gradual decline in purchasing power in the region.

III. Regional trends in global nutrition targets in sub-Saharan Africa and North Africa

In 2012, the World Health Assembly adopted six nutrition targets. Four of these six targets were selected to monitor progress towards achieving the second target of the second Sustainable Development Goal: stunting, wasting and overweight in children under five years of age, and anemia in women aged 15-49 years. The seventh target, which was adopted in 2013 by the World Health Assembly, is to halt the rise in adult obesity⁶.

Table (04): Regional trends for global nutrition targets for 2022

Region	Low Birthweight	Exclusive Breastfeeding (0-5 months)	Stunting (<5 years)	Overweight (<5 years)	Wasting (<5 years)	Anemia in Women (15-49 years)	Obesity in Adults (>18 years)
North Africa	14.1	35.6	21.7	12.3	6.3	31.1	31.7
Sub-Saharan Africa	13.9	48.0	31.3	3.7	5.7	41.7	11.4

⁶ Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 32

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 35

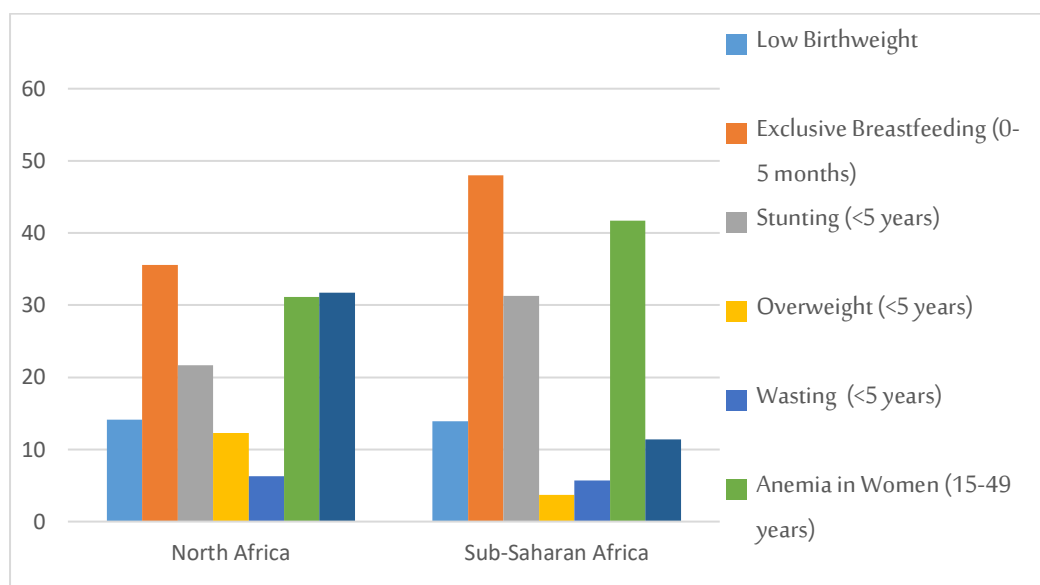


Figure (05): Regional trends for global nutrition targets for 2022

Source: Excel output based on data 04

The table and figure above show the regional trends for the 2022 global nutrition targets in both North and Sub-Saharan Africa. Comparatively, we note the following:

Regarding the rate of low birth weight, North Africa recorded a rate of 14.1%, approximately 0.2% higher than Sub-Saharan Africa, which recorded 13.9%.

Regarding the prevalence of exclusive breastfeeding among infants under five months, Sub-Saharan Africa recorded a rate of 48%, 12.4% higher than North Africa, which recorded 35.6%.

Regarding the prevalence of stunting among children under five years, Sub-Saharan Africa recorded a rate of 31.3%, which is lower on the index, compared to North Africa, which recorded 21.7%.

Regarding the prevalence of overweight among children under five years, North Africa recorded a rate of 12.3%, approximately 8.6% higher than Sub-Saharan Africa, which recorded 3.7%. Regarding the prevalence of wasting among children under five years of age, North Africa recorded a rate of 6.3%, approximately 0.6% higher than sub-Saharan Africa, which recorded 5.7%.

Regarding the prevalence of anemia among women aged 15 to 49 years, sub-Saharan Africa recorded a very high rate of 41.7%, approximately 9.6% higher than North Africa, which recorded 31.1%, also a very high rate.

Regarding the prevalence of obesity among the population over eighteen years of age, North Africa recorded a high rate of approximately 31.7%, while sub-Saharan Africa recorded a rate of 11.4%, far ahead of North Africa.

IV. Food insecurity in sub-Saharan Africa and North Africa

Food insecurity is the opposite of food security, defined as the lack of adequate access to safe, healthy, and nutritious food⁷. Food insecurity has become a phenomenon inherent in developing countries. This is due to the inability to meet demand through local agricultural and agricultural production for several reasons, starting with climate fluctuations, the lack of technology in the production process, conflicts, in addition to the inability to provide needs from other countries. It is divided into severe food insecurity and moderate or severe food insecurity, which we will address in particular in North Africa and sub-Saharan Africa through the following⁸:

Severe food insecurity: refers to the lack of sufficient food for an individual for one day or more. This is what we will observe in both North Africa and Sub-Saharan Africa through the following:

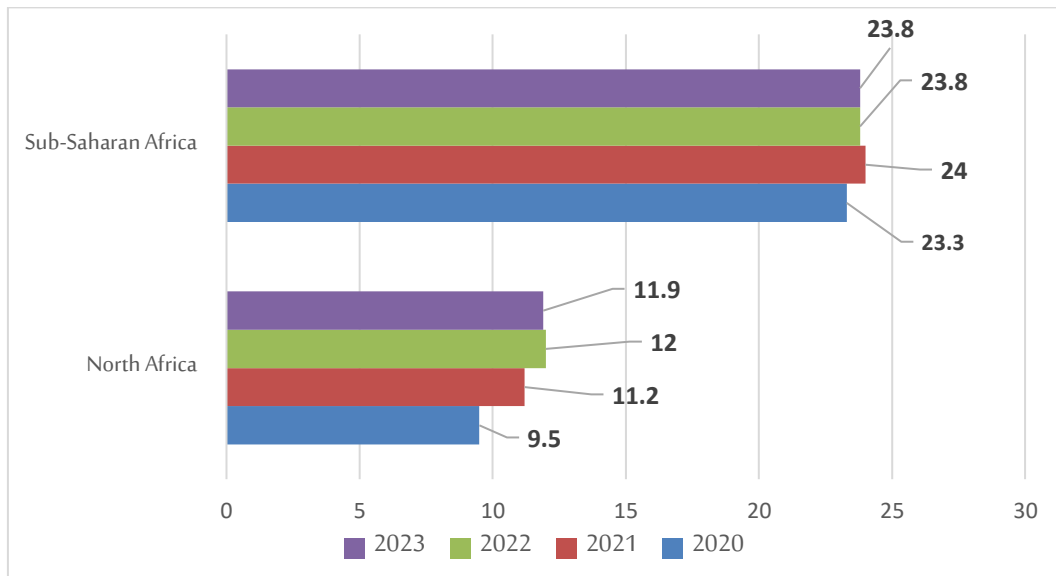


Figure (06): Prevalence of severe food insecurity based on the Food Insecurity Experience Scale 2020-2023

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 14

The figure above shows the prevalence of severe food insecurity, based on the Food Insecurity Experience Scale for the period from 2020 to 2023, we find that the rates recorded in North Africa are increasing, with a rate of 9.50% recorded in 2020 as the lowest rate. Then, in 2021, a 1.70% increase was recorded, for a total rate of 11.20%. It continued to rise, reaching 12% in 2022, followed by a slight decrease in 2023, with a rate of 11.9%, an increase of 2.40% compared to the rate recorded in 2020. This is due to the crises witnessed in neighboring countries and the resulting displacement of displaced persons and migrants fleeing war and hunger to northern regions.

⁷ Rezaei Mahsa; Fatemeh Ghadamgahi; Ahmad Jayedi; Pishva Arzhang; Saeed Yekaninejad; Leila Azadbakht, " The association between food insecurity and obesity, a body shape index and body roundness index among US adults", Scientific Reports, vol 14, no 01, 2024, p 01.

⁸ Nadia Soudani, "The Problem of Food Insecurity Due to Food Loss and Waste in Sub-Saharan Africa," New Economics Journal, Vol. 12, No. 3, 2021, p. 309.

As for Sub-Saharan Africa, we note a near-stabilization in the prevalence of food insecurity during this period, with a rate of 23.3% recorded in 2020. However, it increased by about 0.7% to reach 24% in 2021, the highest rate recorded during this period. In both 2022 and 2023, a stable rate of 23.8% was recorded, i.e. a decrease of about 0.2% compared to 2021 and an increase of 0.5% compared to 2020. This is primarily due to the region's instability due to the wars that have been witnessed there at various times, in addition to the global economic crises that are directly linked to all parts of the world.

Table (05): Number of People Facing Severe Food Insecurity 2020-2023 (in millions)

Region	2020	2021	2022	2023
North Africa	23.8	28.7	31.1	31.4
Sub-Saharan Africa	258.2	272.8	277.9	284.2

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 15

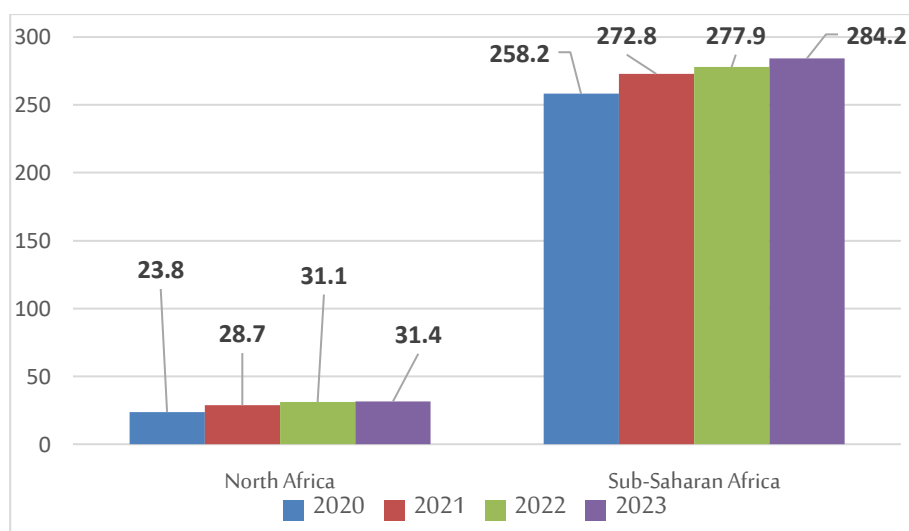


Figure (07): Number of People Facing Severe Food Insecurity 2020-2023 (in millions)

Source: Excel output based on data 05

The number of people facing food insecurity in North Africa has been increasing since 2020 until 2023. In 2020, 23.8 million people were recorded facing food insecurity, and this number rose to 28.7 million in 2021, an increase of 4.9 million people in one year. In 2022, this number increased by about 2.4 million people, reaching 31.1 million people, and continued to rise to 31.4 million people in 2023, an increase of 7.6 million people in less than three years. This is evidence of the worsening food crisis in the region.

The number of people facing food insecurity in sub-Saharan Africa in 2020 was approximately 258.2 million, rising by approximately 14.6 million to 272.8 million in 2021, and increasing by approximately 5.1 million to a total of 277.9 million in 2022. In 2023, approximately 284.2 million people were recorded, an increase of 26 million compared to 2020.

Moderate or severe food insecurity: Moderate food insecurity expresses uncertainty about access to food, which leads to sacrificing other basic needs just to eat food that may not be the most nutritious,

leading to malnutrition, which is the beginning of severe food insecurity. This is what we will examine in both North Africa and Sub-Saharan Africa through the following⁹:

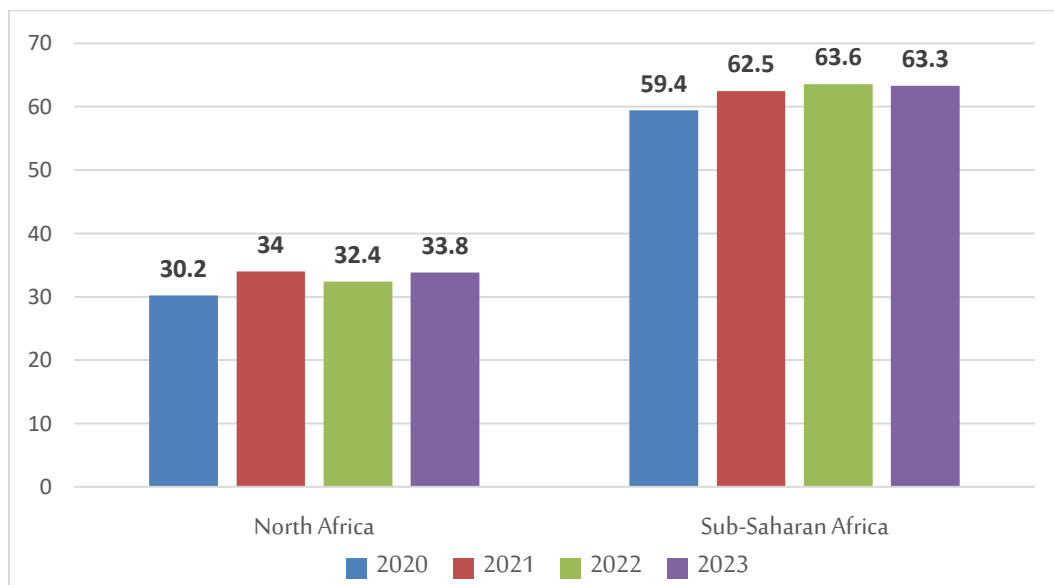


Figure (08): Prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale 2020-2023

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 14

We note from the figure that the prevalence of moderate or severe food insecurity in North Africa fluctuated between rising and falling during the period 2020-2023. The lowest rate was recorded in 2020, at 30.20%. In 2021, the rate rose by about 3.80%, reaching 34%, the highest rate during the period under study. It then declined by about 1.60% in 2022, settling at 32.4%, before rising again by about 1.4% in 2023, reaching 33.80%.

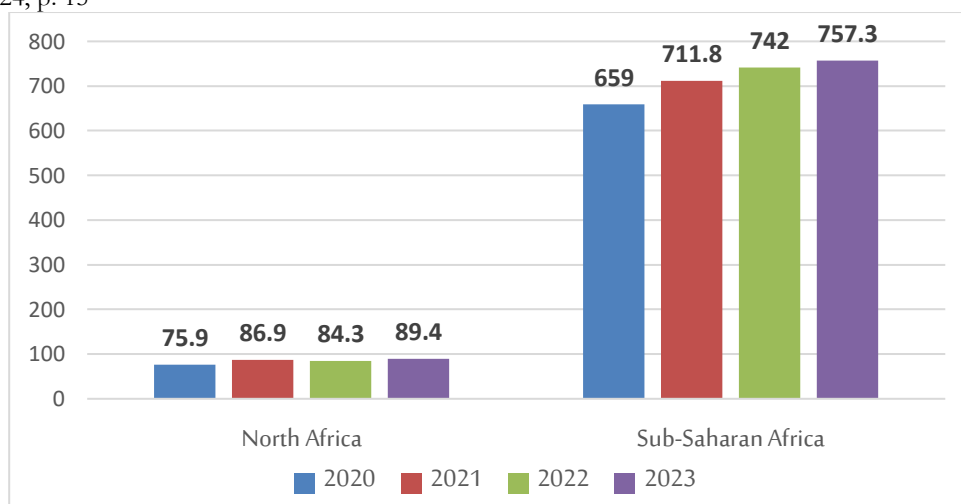
In sub-Saharan Africa, moderate or severe food insecurity is very high, with 59.4% recorded in 2020, the lowest rate during this period. It then rose by about 3.10% in 2021 to reach 62.5%, then increased by 1.1% in 2022 to reach 63.6%, the highest rate during this period, before declining by 0.3% in 2023 to reach 63.3%. This increase is explained by the ongoing conflicts in the region and the lack of interest in agriculture and farming, in addition to the inability of countries to meet food needs through imports from abroad due to their fragile economies.

⁹ - Hunger and food insecurity, Food and agriculture organization of the united nations, 2024, https://www.fao.org/hunger/en?fbclid=IwY2xjawHE58lleHRuA2FlbQIxMAABHXSPNd7ZgjZ0cwS025PPv1WYEtKVxfrp9322bMMrOMfX_gVtj4tW4PT-_A_aem_RbYAylf8p0tasm0o1nIzQ, 17-04-2025, 20: 21h.

Table (06): Number of people facing moderate or severe food insecurity 2020-2023 (million people)

Region	2020	2021	2022	2023
North Africa	75.9	86.9	84.3	89.4
Sub-Saharan Africa	659.0	711.8	742.0	757.3

Source: By researchers based on: Food and Agriculture Organization of the United Nations, United Nations Children's Fund, International Fund for Agricultural Development, World Health Organization, World Food Program, The State of Food Security and Nutrition in the World 2024 - Financing for the Eradication of Hunger, Food Insecurity and Malnutrition in All Its Forms, Rome, 2024, p. 15

**Figure (09):** Number of people facing moderate or severe food insecurity 2020-2023 (million people)

Source: Excel output based on data 06

The table and figure above show the number of people facing moderate or severe food insecurity during the period 2020 to 2023 in both North and Sub-Saharan Africa. Accordingly, North Africa recorded approximately 75.9 million people experiencing moderate or severe food insecurity in 2020. This number then increased by approximately 11 million people in 2021, reaching 86.9 million people. It then decreased by 2.6 million people in 2022, bringing the total to 84.3 million people. In 2023, it rose again by approximately 3.1 million people, reaching 89.4 million people. This indicates the widespread prevalence of moderate or severe food insecurity in the region.

In sub-Saharan Africa, the number of people facing moderate or severe food insecurity continues to rise from 2020 to 2023. In 2020, 659 million people were recorded, followed by an increase of approximately 52.8 million in 2021, bringing the total to 711.8 million. The increase continued in 2022, by approximately 30.2 million, reaching 742 million. In 2023, 757.3 million people were recorded, representing an increase of 15.3 million compared to 2022 and a difference of 98.3 million compared to 2020. This is due to the lack of security stability and frequent wars in the region, in addition to climate change and the lack of technology related to agricultural production.

Conclusion

We conclude that food insecurity is among the risks caused by a group of factors, including natural factors such as climate change of various types, and others related to irrational human activity such as conflicts and wars that lead to the spread of poverty and hunger, which appears through the spread of a group of factors that were studied by projection on both Sub-Saharan Africa and North Africa, such as

the malnutrition index and the healthy diet index, in addition to the food insecurity index, and even the regional trends of global targets related to nutrition, which led us to identify the differences between the two regions with regard to each indicator, and finally to stand that the prevalence of food insecurity in the Sub-Saharan Africa region is constantly increasing at high rates, and the North Africa region is witnessing fluctuations in the prevalence of food insecurity through the indicators studied during this period, despite the components and resources it possesses, although the percentage of the population of North Africa represents 22.1% of the population of Sub-Saharan Africa, but when looking at the seven indicators related to the regional trend of global nutrition targets in the year 2022, we find that the percentages are very close in each indicator and there is an outperformance in some cases, which indicates the effects that Border problems, in particular, result in disease transmission, illegal immigration, and nutritional imbalances.

Therefore, we support the hypothesis that the crises in Sub-Saharan Africa and their repercussions on North Africa are leading to increased food insecurity in both regions. International data also shows that the food security crisis worsened in Sub-Saharan Africa between 2020 and 2023, as the COVID-19 pandemic disrupted supply chains and raised prices, the Russia-Ukraine conflict increased the cost of food and fertilizers, and climate change exacerbated tensions due to recurrent droughts and floods. In North Africa, food insecurity rates rose to historic levels, with the number of malnourished people reaching more than 59 million in 2022. This was driven by the effects of the pandemic, rising food and fertilizer prices due to war, and extreme weather events such as heat-related drought and reduced agricultural cash production. Thus, it was demonstrated that food security in Sub-Saharan Africa and North Africa (2020–2023) declined as a result of the pandemic, the Ukrainian war, and climate change.

Recommendations

- Work to contain the crises occurring in sub-Saharan Africa and develop special investment programs in the agricultural sector.
- Encourage home farming as a primary food resource.
- Encourage domestic and foreign agricultural investment in both regions.
- Organize food programs and systems in a manner consistent with the culture of the communities.
- Work to mitigate and limit illegal migration from the south to the north of Africa.
- Establish free trade zones, particularly with regard to the exchange of goods and products.

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