Food and Agriculture Organization of the United Nations

IFAD Investing in rural people

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WFP World Food Programme

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UNITED NATIONS ESCWA

Shared Prosperity Dignified Life

2023

NEAR EAST AND NORTH AFRICA

REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION

STATISTICS AND TRENDS

COVER PHOTOGRAPH ©FAO/Hamada Soliman
EGYPT. Cucumber plantations growth in some villages in Cairo, Egypt.

2023
NEAR EAST
AND NORTH AFRICA

REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION

STATISTICS AND TRENDS

CONTENTS

FIGURES

TABLES

FOREWORD

The 2023 Near East and North Africa Regional Overview of Food Security and Nutrition comes at a critical juncture as several shocks have hit the region in recent years, including the COVID-19 pandemic and the war in Ukraine. In 2022, international and domestic food and fertilizer prices hit record highs. Moreover, extreme weather events and droughts reduced yields in several wheat-producer countries in the region.

The Overview provides an update on the progress made in the Arab States towards Sustainable Development Goal (SDG) 2 targets related to hunger, food security and nutrition, as well as the progress made towards the 2025 global nutrition targets set by the World Health Assembly (WHA).

In 2022, hunger in Arab countries reached its highest value since the year 2000. The number of undernourished people was 59.8 million in 2022, 75.9 percent higher than in 2000. This corresponded to 12.9 percent of the population, well above the world average of 9.2 percent. Moderate or severe food insecurity affected 170.1 million people, 36.6 percent of the population, and 61.0 million people suffered from severe food insecurity, which is a concerning increase of 3.8 million people from the previous year.

Conflict, climate change, economic slowdowns and social unrest are the major drivers of food insecurity in the region. Furthermore, high-income inequality and poverty magnify the negative impact of these drivers. Over two-thirds of the undernourished people in Arab countries were from conflict-hit countries, and almost half of the hungry people live in LDCs. Somalia, Yemen, and the Syrian Arab Republic are suffering the most from hunger.

International commodity prices reached a record level in March 2022 due to the effects of the COVID-19 pandemic and the war in Ukraine. The region depends heavily on imported foodstuffs, and many countries rely on imported staples from the Black Sea region. In addition, droughts in the region decreased yields in many countries, further increasing the import requirements of the region. Limited land and water endowments and a rapidly growing population put an additional burden on regional agrifood systems. These challenges have made the region highly vulnerable to international commodity markets, including supply side and price shocks. High international food prices have increased food import bills, put pressure on foreign exchange rates, and generated high domestic food inflation eroding purchasing power and leading to a cost of living crisis, especially for the most vulnerable population as they spend a larger part of their income on food.

Food inflation has been a key driver of food insecurity even before the COVID-19 pandemic. Food price inflation threatens not only food security but also good nutrition and health. Since 2017, the cost of a healthy diet in the Arab States has increased annually, making healthy and diverse diets less affordable. Food price inflation also has long-lasting effects on nutritional and health outcomes, especially for children, for example, by increasing the risk of stunting, thus endangering the future itself of the region.

Finally, the Arab region continued to suffer from the triple burden of malnutrition: besides undernutrition, child overweight/adult obesity and micronutrient deficiencies, such as anaemia. For example, the prevalence of overweight among children and the prevalence of anaemia among women were higher than the world average in 2022. Furthermore, obesity among adults was more than double the global average, and the rate of exclusive breastfeeding of infants was below the world average.

Based on the facts presented by the Overview, Arab States are off-track in achieving SDG Target 2.1 — ensuring regular access to sufficient, safe and affordable healthy food for all people — and SDG Target 2.2 — ending all forms of malnutrition, and several WHA targets.

However, despite these alarming figures and trends, there is still a chance to reverse this situation, overcome these crises and challenges, and return to the path towards achieving food and nutrition goals by reorienting our approach towards transforming agrifood systems in regional countries to make them more efficient, inclusive, sustainable, and resilient to multiply and increasing shocks and stresses.

Combatting hunger and poverty, transforming agrifood systems, and making them more resistant to emerging crises requires bold actions in partnership with international organizations, governments, the business sector, civil society and academia. FAO and its partner development organizations are supporting member states in these efforts.

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ACKNOWLEDGEMENTS

ABBREVIATIONS

BMI   body mass index

FAO   Food and Agriculture Organization of the United Nations

FIES   Food Insecurity Experience Scale

IFAD   International Fund for Agricultural Development

LDCs   least developed countries

PoU   Prevalence of undernourishment

PPP   purchasing power parity

SDG   Sustainable Development Goals

UNICEF   United Nations Children's Fund

WFP   World Food Programme

WHA   World Health Assembly

WHO   World Health Organization

CHAPTER 1
SUSTAINABLE DEVELOPMENT GOAL 2.1: UNDERNOURISHMENT AND FOOD INSECURITY

Key messages

- Hunger in the Arab States reached its highest value in 2022 since 2000. The number of undernourished people was 59.8 million in 2022, 75.9 percent higher than in 2000. This corresponded to 12.9 percent of the population in 2022, well above the world average of 9.2 percent.

- The prevalence of undernourishment (PoU) was the highest in low-income countries and Arab States least developed countries (LDCs), where almost every third person suffered from hunger. Somalia had the highest PoU level (48.7 percent), followed by Yemen (34.5 percent), and the Syrian Arab Republic (27.8 percent). Undernourishment in conflict countries (23.6 percent) was almost four times higher than in non-conflict countries (6.6 percent) in 2022. In upper-middle-income countries, hunger was also higher (16.3 percent) than the average of Arab States. Undernourishment is less frequent in lower-middle-income countries (6.6 percent). High-income countries had a very low level of PoU (2.8 percent).

- Hunger in the Arab region reached its lowest level in 2010, before the Arab Spring, when 9.7 percent of the region's population suffered from hunger. PoU rose sharply, by one-third from 2010 until 2022, which has been driven mainly by the increase in hunger in upper-middle-income countries and lower-middle-income countries due to socio-economic and commodity price shocks, such as the effects of the Arab Spring, the increase of food prices in 2007−2011, and recently the COVID-19 pandemic and the war in Ukraine.

- Moderate or severe food insecurity affected 170.1 million people, or 36.6 percent of the population in 2022, a slight decrease from 2021, when 173.3 million people, or 37.9 percent of the population were food insecure, deprived of regular access to sufficient and nutritious food. In 2022, 61.0 million people suffered from severe food insecurity, which is another measure that approximates hunger. This is an increase of 3.8 million people from the previous year.

- Recent trends in hunger and food insecurity suggest that the region is not on track to achieve Zero Hunger (SDG 2) by 2030.

1.1. PREVALENCE OF UNDERNOURISHMENT

The Food and Agriculture Organization of the United Nations (FAO) PoU indicator is derived from official country data on food supply, food consumption and dietary energy needs in the population considering such demographic characteristics as age, sex and level of physical activity. Designed to capture a state of chronic energy deprivation, it does not reflect the short-lived effects of temporary crises or a temporarily inadequate intake of essential nutrients. FAO strives always to improve the accuracy of the PoU estimates by taking into account new information; the entire historical series is updated for each report. For this reason, only the current series of estimates should be used, including for values in past years.[1]

FIGURE 1

PREVALENCE OF UNDERNOURISHMENT IN THE WORLD AND ARAB STATES, AND THE NUMBER OF UNDERNOURISHED IN THE ARAB STATES
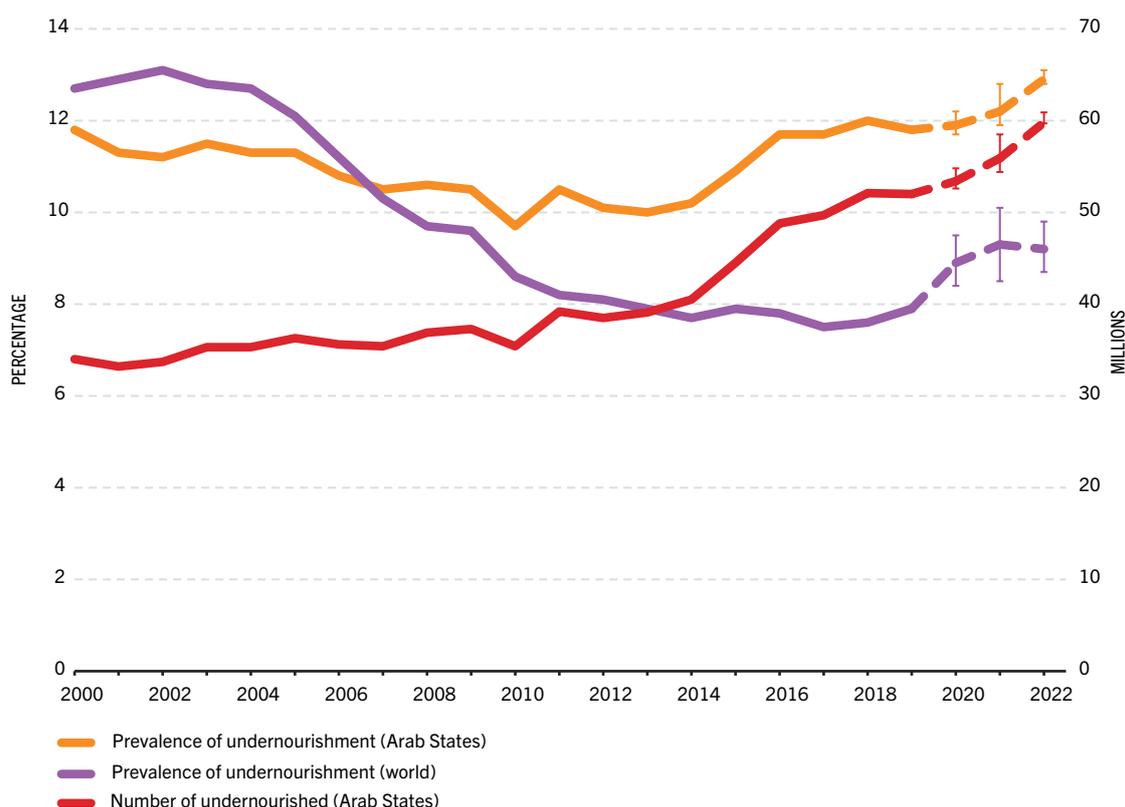
Note: The values for 2020 to 2022 are projections.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

World hunger decreased slightly from 9.3 percent in 2021 to 9.2 percent in 2022. In other words, almost one out of ten of the world's inhabitants regularly go to bed hungry.

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1   For full details, please see FAO, IFAD, UNICEF, WFP & WHO. 2019. *The State of Food Security and Nutrition in the World 2019. Safeguarding against economic slowdowns and downturns.* Rome, FAO.

However, undernourishment in the Arab States continued its growing trend (Figure 1 and Table 1) and, at 12.9 percent in 2022, remained well above the world average. In addition, hunger reached its highest value in 2022 since 2000, when hunger hit 11.8 percent of the Arab population. The prevalence of undernourishment (PoU) increased by 0.7 percentage point, from 12.2 percent in 2021 to 12.9 percent in 2022. Conflict, climate change, economic slowdowns and downturns are the major drivers of food insecurity in the region: six countries in the region are hit by conflicts, and the region is one of the most vulnerable globally to climate change, the most arid in the world, with scarce water and land resources threatening more and more frequently crop yields (FAO, 2023c).

FIGURE 2

PREVALENCE OF UNDERNOURISHMENT IN THE
ARAB STATES BY SUBREGION
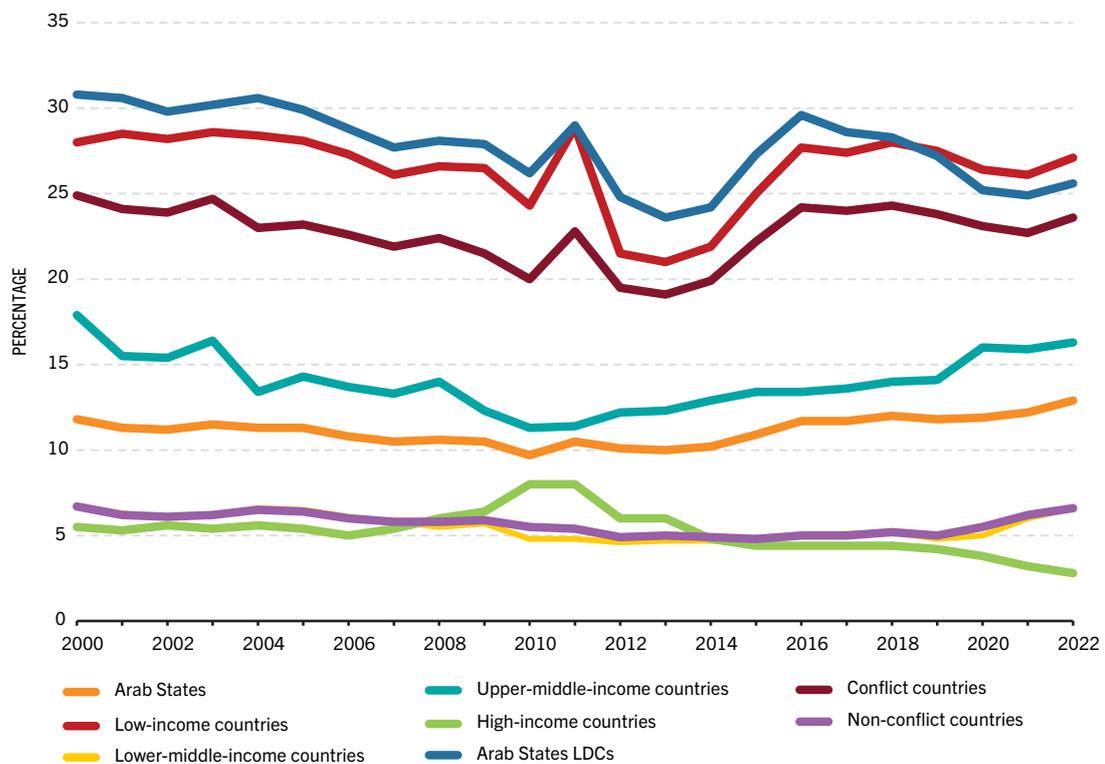
Note: The values for 2020 to 2022 are projections.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 1
PREVALENCE OF UNDERNOURISHMENT (PERCENT)

	2000	2010	2014	2019	2020	2021	2022
World	**12.7**	**8.6**	**7.7**	**7.9**	**8.9**	**9.3**	**9.2**
Arab States	11.8	9.7	10.2	11.8	11.9	12.2	12.9
Low-income countries	28.0	24.3	21.9	27.5	26.4	26.1	27.1
Lower-middle-income countries	6.7	4.8	4.7	4.8	5.0	6.0	6.6
Upper-middle-income countries	17.9	11.3	12.9	14.1	16.0	15.9	16.3
High-income countries	5.5	8.0	4.8	4.2	3.8	3.2	2.8
Arab States LDCs	30.8	26.2	24.2	27.2	25.2	24.9	25.6
Conflict countries	24.9	20.0	19.9	23.8	23.1	22.7	23.6
Non-conflict countries	6.7	5.5	4.9	5.0	5.5	6.2	6.6

Note: The values for 2020 to 2022 are projections.
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

In 2022, the PoU was the highest in low-income countries[2] (27.1 percent), and Arab States LDCs (25.6 percent): almost every third person suffered from hunger in these countries (Figure 2, Table 1). Undernourishment in conflict countries (23.6 percent) was almost four times higher than in non-conflict countries (6.6 percent). In upper-middle-income countries, hunger was also higher (16.3 percent) than the average of Arab States (12.9 percent). Hunger is less frequent in lower-middle-income countries (6.6 percent). High-income countries had a very low level of PoU (2.8 percent).

Hunger in the Arab region reached its lowest level in 2010, before the Arab Spring, when 9.7 percent of the region's population suffered from hunger. Hunger has risen by one-third from 2010 until 2022 (Figure 2), which has been driven mainly by the increase in hunger in upper-middle-income countries (44.2 percent increase since 2021, Figure 2) and lower-middle-income countries (37.5 percent increase) due to socio-economic and commodity price shocks, such as the increase of food prices in 2007—2011, the effects of the Arab Spring, and recently the COVID-19 pandemic and the war in Ukraine. Due to conflicts and staple food price shocks in 2007—2008 and 2010—2011, there was a sharp increase in PoU after 2013, especially in the Arab States LDCs, low-income countries, conflict countries and high-income countries. The two exceptions where the PoU has decreased since 2010 are high-income countries and Arab States LDCs, where the PoU decreased by almost two-thirds and one-quarter, respectively.

In 2020, the measures implemented to contain the COVID-19 pandemic sent the Arab States (except for Egypt) into an economic downturn, widened inequalities and worsened food security (FAO *et al.,* 2023). Furthermore, given the scarcity of required natural resources for food production, the region depends heavily on importing agricultural products, which makes it vulnerable to international commodity markets, supply shocks and price inflation. Many countries in the Arab region heavily depend on imported foodstuff and fertilizers from the Russian Federation and Ukraine, including wheat as a staple food (FAO, 2022b). The surge in international prices has put pressure on the international reserves of food-importing countries and, consequently, on their exchange rates.

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2   See Annex IV.

High international food prices and currency depreciation have generated high domestic inflation and food prices, which erodes purchasing power and negatively affects access to food. The most vulnerable population tends to be hurt disproportionately by rising prices. Food inflation has been key in driving food insecurity since before the COVID-19 pandemic in the region (Gatti *et al.,* 2023).[3]

Considering trends in undernourishment since 2019, before the COVID-19 pandemic and the war in Ukraine, undernourishment increased overall in the Arab region from 11.8 percent in 2019 to 12.9 percent in 2022. The two crises had the most significant effect in lower-middle-income countries (37.5 percent), non-conflict countries (32.0 percent) and upper-middle-income countries (15.6 percent). On the other hand, high-income countries succeeded in decreasing undernourishment significantly by one-third since 2019, as oil-exporting countries benefitted from the oil price boom in the post-COVID-19 economic recovery and from the oil price shocks due to the war in Ukraine.

FIGURE 3

NUMBER OF PEOPLE UNDERNOURISHED IN THE
ARAB STATES BY SUBREGION
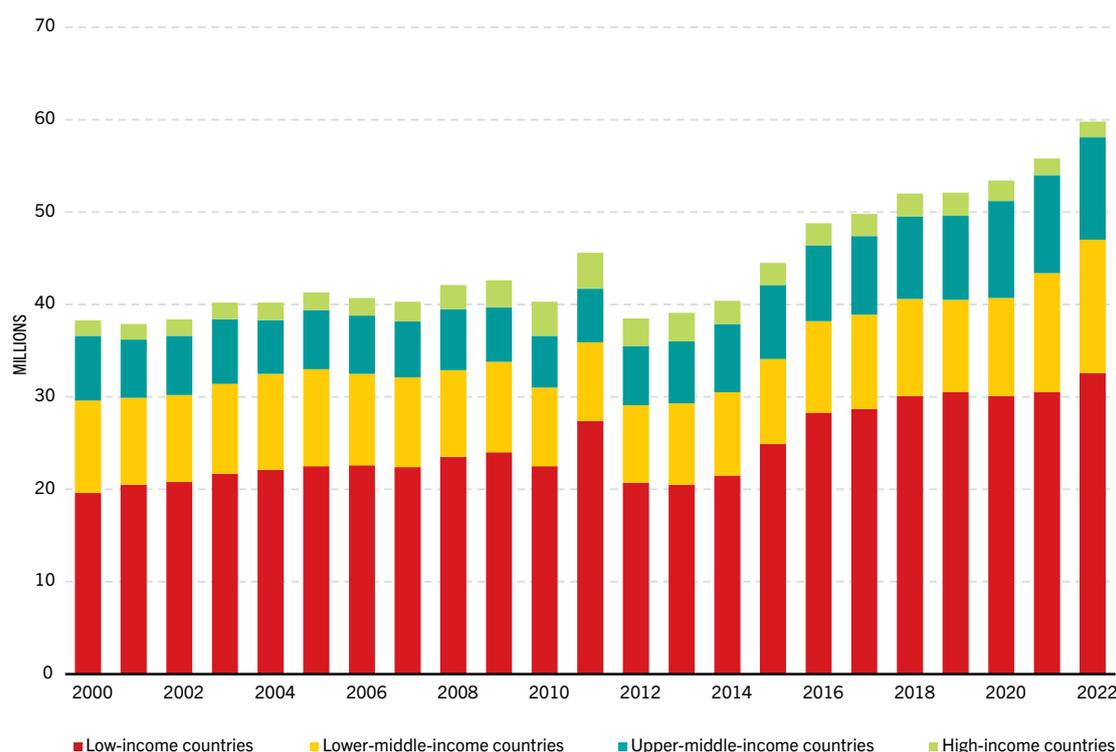
Note: The values for 2020 to 2022 are projections.
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

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3   According to World Bank (Gatti *et al.*, 2023), the food-insecure population in the Middle-East and North Africa (MENA) region attributed to inflation grew by 66 percent between 2018 (pre-pandemic) and 2023. (2018 refers to the 2017–2019 period, while 2023 refers to the 2022–2024 period, as data is available as three-year centered moving averages).

TABLE 2

NUMBER OF PEOPLE UNDERNOURISHED (MILLIONS)

	2000	2010	2014	2019	2020	2021	2022
World	781.7	597.8	563.9	612.8	701.4	738.8	735.1
Arab States	34.0	35.4	40.5	52.0	53.4	55.9	59.8
Low-income countries	19.6	22.5	21.5	30.5	30.1	30.5	32.6
Lower-middle-income countries	10.0	8.5	9.0	10.0	10.6	12.9	14.4
Upper-middle-income countries	7.0	5.6	7.4	9.1	10.5	10.6	11.1
High-income countries	1.7	3.7	2.5	2.5	2.2	1.8	1.7
Arab States LDCs	21.2	25.0	20.3	26.3	25.1	25.5	26.9
Conflict countries	24.8	26.1	28.0	37.9	37.7	38.0	40.5
Non-conflict countries	12.6	12.8	12.5	14.1	15.8	17.9	19.3

Note: The values for 2020 to 2022 are projections.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

The number of undernourished people reached 59.8 million in 2022, an increase of 75.9 percent since 2000. The number of undernourished people (Figure 3, Table 2) globally decreased from 2021 (738.8 million) to 2022 (735.1 million). However, undernourishment increased in the Arab region in the same period: from 55.9 million in 2021 to 59.8 million. 8.1 percent of the world's undernourished people lived in the Arab States in 2022. Over two-thirds (67.7 percent) of the undernourished people in the Arab States were from conflict-hit countries (40.5 million). Over half (32.6 million) of undernourished people in the Arab region lived in low-income countries, 26.9 million in the Arab States LDCs, 14.4 million in lower-middle-income countries, and 11.1 million in upper-middle-income countries.

FIGURE 4

PREVALENCE OF UNDERNOURISHMENT IN THE
ARAB STATES BY COUNTRY AND SUBREGION
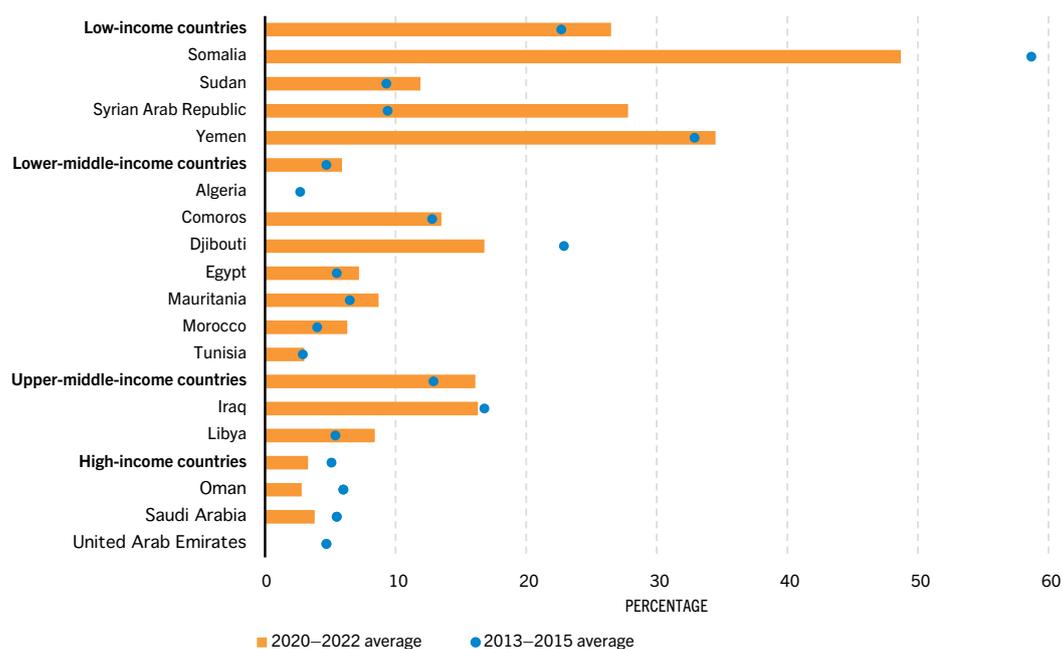
Note: The values for 2020 to 2022 are projections. The PoU is less than 2.5 percent for Algeria and the Unted Arab Emirates in 2020–2022.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

Undernourishment varies significantly within each subregion (Figure 4). Somalia had the highest PoU among low-income countries: almost every other person (48.7 percent in 2020−2022, down from 58.7 percent in 2013−2015) suffered from hunger, with prolonged drought, conflict, high food and water prices, and displacement being the major drivers of severe hunger (IPC, 2023a), aggravated by severe desert locust upsurge through 2020 and 2021. Somalia is followed by Yemen (34.5 percent), the Syrian Arab Republic (27.8 percent), and Djibouti (16.8 percent). The much higher PoU level in upper-middle-income countries compared to lower-middle-income countries could be explained by the fact that upper-middle-income countries include two conflict-hit countries (Iraq and Libya, where 16.3 percent and 8.4 percent, respectively, of the population was undernourished in 2022), while lower-middle-income countries consist of many countries that have relatively well-developed agricultural sectors with a larger food production basis, such as Algeria, Morocco or Tunisia. In lower-middle-income countries, hunger was the highest in Djibouti (16.8 percent), followed by Comoros (13.5 percent), Mauritania (8.7 percent), Egypt (7.2 percent), Morocco (6.3 percent), and Tunisia (3.0 percent). High-income countries, which benefit from high oil export revenues, had low levels of hunger: Oman (2.8 percent), Saudi Arabia (3.8 percent).

Considering hunger trends in regional countries, Figure 4 shows that hunger increased in all income categories between the 2013−2015 and 2019−2021 periods, except for high-income countries. Hunger increased by 16.7 percent in low-income countries and in almost all conflict countries: in Sudan by 28.0 percent, in the civil-war-hit Syrian Arab Republic, it almost tripled. In Yemen, hunger increased from already a very high level (34.5 percent) by 4.9 percent. The Syrian Arab Republic and Yemen remain two of the most food-insecure countries in the world and are marked as hunger hotspots of acute food insecurity[4] (WFP and FAO, 2023). Among lower-middle-income countries, undernourishment increased in Egypt by 30.9 percent, in Mauritania by 33.8 percent, and in Morocco by 57.5 percent. PoU remained relatively low in Tunisia. PoU decreased significantly in Djibouti by 26.6 percent but remained still high in 2020-2022 at 16.8 percent due to low dietary diversity, low purchasing power, and limited livelihood activities (IPC, 2023a). Hunger increased in Libya by 55.6 percent, mainly due to the second Libyan Civil War (2014−2020). In the other conflict-hit country, Iraq, hunger stabilized at a high level, around 16 percent. Hunger decreased in all high-income countries, with Oman experiencing the lowest undernourishment (2.8 percent in 2020−2022).

1.2. PREVALENCE OF FOOD INSECURITY BASED ON THE FOOD INSECURITY EXPERIENCE SCALE

The prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES) is an estimate of the proportion of the population facing moderate or severe constraints on their ability to obtain sufficient food over the course of a year. People face moderate food insecurity when they are uncertain of their ability to obtain food and have been forced to reduce, at times over the year, the quality and/or quantity of food they consume due to lack of money or other resources. Severe food insecurity means that individuals have likely run out of food, experienced hunger and, at the most extreme, have gone for days without eating, putting their health and well-being at serious risk.

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4   Hunger hotspots and "acute food insecurity" refers to the indicator of the Integrated Food Security Phase Classification (IPC/CH). For more details see for example page 2 of FAO-WFP, 2023.

Food insecurity as measured by the FIES refers to limited access to food, at the level of individuals or households, due to lack of money or other resources. The severity of food insecurity is measured using data collected with the Food Insecurity Experience Scale survey module (FIES-SM), based on a set of eight questions (FAO *et al.,* 2022). One of the strengths of the FIES is its capacity to capture ongoing events that affect personal and household income and the ability to obtain food in a timely manner and in enough quantity to meet daily requirements (FAO *et al.,* 2023).

FIGURE 5

PREVALENCE OF FOOD INSECURITY IN THE ARAB STATES BY SUBREGION
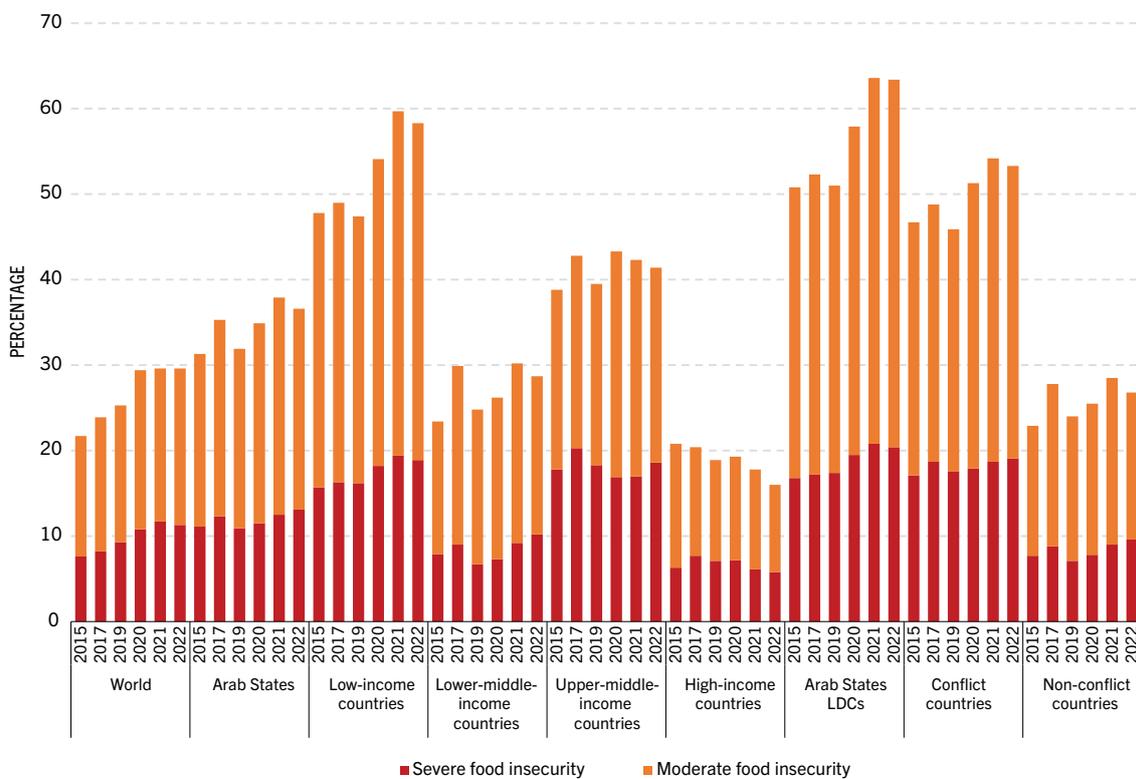
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 3
PREVALENCE OF FOOD INSECURITY (PERCENT)

	Severe food insecurity					Moderate or severe food insecurity				
	2015	2019	2020	2021	2022	2015	2019	2020	2021	2022
World	**7.6**	**9.3**	**10.8**	**11.7**	**11.3**	**21.7**	**25.3**	**29.4**	**29.6**	**29.6**
Arab States	11.1	10.9	11.5	12.5	13.1	31.3	31.9	34.9	37.9	36.6
Low-income countries	15.7	16.2	18.2	19.4	18.9	47.8	47.4	54.1	59.7	58.3
Lower-middle-income countries	7.9	6.7	7.3	9.2	10.2	23.4	24.8	26.2	30.2	28.7
Upper-middle-income countries	17.8	18.3	16.9	17.0	18.6	38.8	39.5	43.3	42.3	41.4
High-income countries	6.3	7.1	7.2	6.1	5.8	20.8	18.9	19.3	17.8	16.0
Arab States LDCs	16.8	17.4	19.5	20.8	20.4	50.8	51.0	57.9	63.6	63.4
Conflict countries	17.1	17.6	17.9	18.7	19.1	46.7	45.9	51.3	54.2	53.3
Non-conflict countries	7.7	7.1	7.8	9.0	9.6	22.9	24.0	25.5	28.5	26.8

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

The prevalence of moderate or severe food insecurity was 29.6 percent globally in 2022, at the same level as in 2021. In the Arab States, it was 36.6 percent in 2022, 7 percentage points higher than the global average (Figure 5, Table 3). From 2021 food insecurity decreased by 3.4 percent in the Arab States. The prevalence of moderate or severe food insecurity was the most elevated in Arab LDCs (63.4 percent), in low-income countries (58.3 percent), and in conflict countries (53.3 percent) in 2022. The prevalence of moderate or severe food insecurity was the lowest in high income countries (16.0 percent). In conflict countries, moderate or severe food insecurity was twice as high (53.3 percent) as in non-conflict countries (26.8 percent).

Severe food insecurity was 20.4 percent in Arab LDCs, 19.1 percent in conflict countries, and 18.9 percent in low-income countries.

Moderate or severe food insecurity increased worldwide from 21.7 percent in 2015 to 29.6 percent (by 36.4 percent) in 2022 (Figure 5, Table 3). The prevalence of moderate or severe food insecurity was higher in the Arab States than in the world in all years from 2015 to 2022, on average by 6.8 percentage points. Both moderate or severe food insecurity and severe food insecurity were higher in the region than the world average in all years between 2015 and 2022, on average by 8.6 percentage points and 2.5 percentage points, respectively.

At the global level, the prevalence of moderate or severe food insecurity increased between 2015 and 2022. In the same period, moderate or severe food insecurity increased in all income groups among Arab States, except in high-income countries, where it decreased by 23.1 percent. The increase in moderate or severe food insecurity between 2015 and 2022 was the most significant in Arab LDCs (24.8 percent), in lower-middle-income countries (22.6 percent), and in low-income countries (22.0 percent). Severe food insecurity increased most outstandingly in lower-middle-income countries (29.1 percent), in non-conflict countries (24.7 percent) and in Arab LDCs (21.4 percent).

FIGURE 6

NUMBER OF SEVERELY FOOD-INSECURE
PEOPLE IN THE ARAB STATES BY SUBREGION
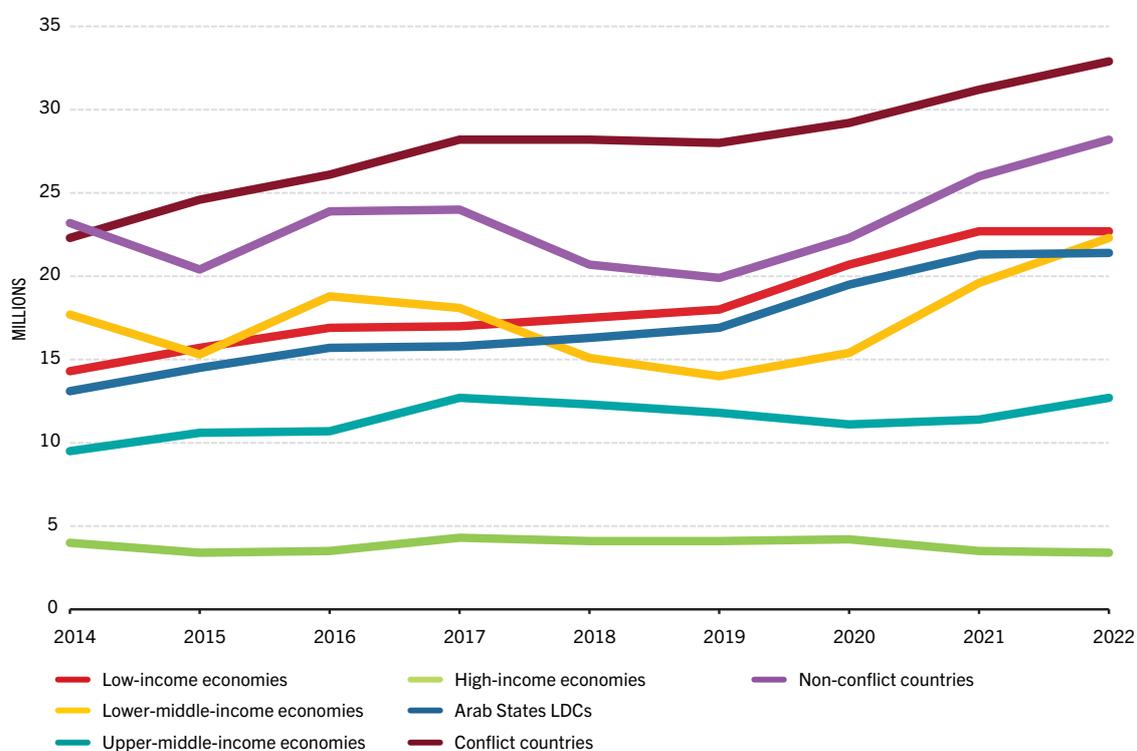
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 4

NUMBER OF SEVERELY FOOD-INSECURE PEOPLE (MILLIONS)

	2015	2017	2019	2020	2021	2022
World	561.5	623.8	719.8	850.7	927.3	900.1
Arab States	45.0	52.2	47.9	51.5	57.2	61.0
Low-income countries	15.7	17.0	18.0	20.7	22.7	22.7
Lower-middle-income countries	15.3	18.1	14.0	15.4	19.6	22.3
Upper-middle-income countries	10.6	12.7	11.8	11.1	11.4	12.7
High-income countries	3.4	4.3	4.1	4.2	3.5	3.4
Arab States LDCs	14.5	15.8	16.9	19.5	21.3	21.4
Conflict countries	24.6	28.2	28.0	29.2	31.2	32.9
Non-conflict countries	20.4	24.0	19.9	22.3	26.0	28.2

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

The number of severely food-insecure people was 900.1 million people globally, out of which 61.0 million lived in the Arab States in 2022 (Figure 6, Table 4). In the Arab region, 22.7 million of severely food-insecure people lived in low-income countries, 22.3 million in lower-middle-income countries, and 21.4 million in the Arab States LDCs.

FIGURE 7

NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE
PEOPLE IN THE ARAB STATES BY SUBREGION
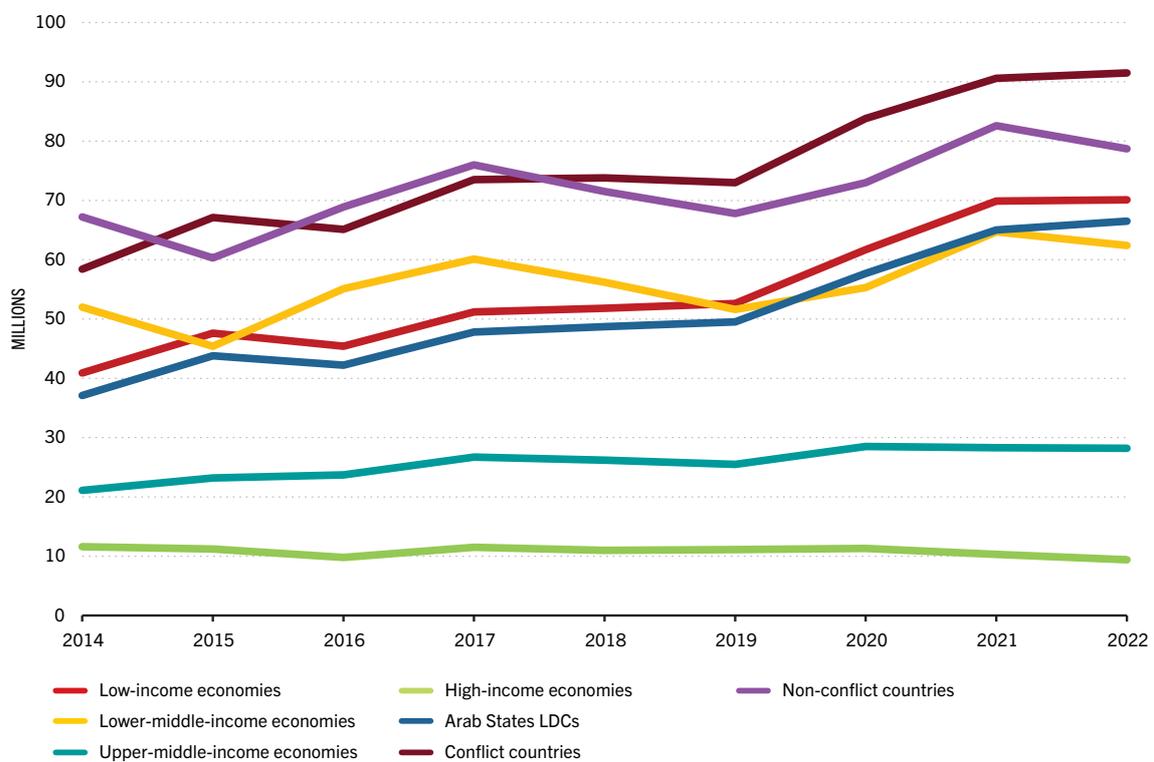
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 5
NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE (MILLIONS)

	2015	2017	2019	2020	2021	2022
World	**1 612.4**	**1 817.0**	**1 966.4**	**2 307.2**	**2 342.5**	**2 356.9**
Arab States	127.4	149.5	140.8	156.8	173.3	170.1
Low-income countries	47.6	51.2	52.6	61.7	69.9	70.1
Lower-middle-income countries	45.4	60.1	51.6	55.3	64.7	62.4
Upper-middle-income countries	23.2	26.7	25.5	28.5	28.3	28.2
High-income countries	11.2	11.5	11.1	11.3	10.3	9.4
Arab States LDCs	43.8	47.8	49.5	57.7	65.0	66.5
Conflict countries	67.1	73.5	73.0	83.8	90.6	91.5
Non-conflict countries	60.3	76.0	67.8	73.0	82.6	78.7

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

The number of moderately or severely food-insecure people was 2.4 billion people worldwide, out of which 170.1 million lived in the Arab States in 2022 (Figure 7, Table 5). In the Arab region, low-income countries had 70.1 million moderately or severely food-insecure people, compared to 62.4 million in lower-middle-income countries, 28.2 million in upper-middle-income countries and 9.4 million in high-income countries. Between 2015 and 2022, food insecurity increased across all country income groups, with the exception of the high-income country group, which saw a decline of 1.8 million. The rise in food insecurity was the highest among Arab LDCs (22.7 million people), low-income countries (22.5 million people), and lower-middle-income countries (17.0 million people).

FIGURE 8

PREVALENCE OF MODERATE OR SEVERE FOOD
INSECURITY IN THE ARAB STATES BY
COUNTRY AND SUBREGION

■ 2020−2022 average   ● 2014−2016 average
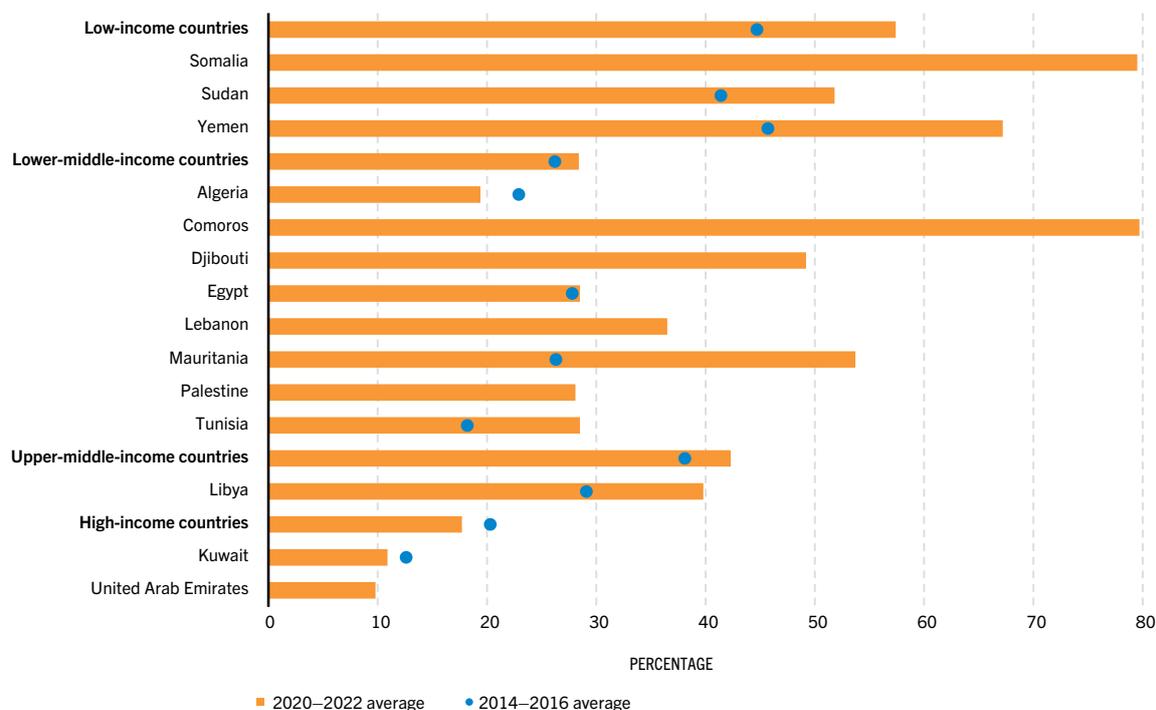
Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

The prevalence of moderate or severe food insecurity (Figure 8) was extremely elevated in Comoros (79.7 percent), in Somalia (79.5 percent), and in Yemen (67.2 percent). Poverty and vulnerability to climate shocks are among the major drivers behind the food insecurity in Comoros. In Somalia, in the period October−December 2022, about 5.6 million people experienced high levels of acute food insecurity (IPC, 2022a), classified as Crisis or worse (IPC Phase 3 or above[5]). Among these, 1.5 million people are classified in Emergency (IPC Phase 4) and 214 000 in Catastrophe (IPC Phase 5). The main driver of food insecurity is conflict and a high number of internally displaced people, and given the droughts, the dependence on imported grains. In Yemen, approximately 17 million people, over half the population, experienced high levels of Acute Food Insecurity (IPC Phase 3 or above), from which 6.1 million people were classified in IPC Phase 4 from October to December 2022 (IPC 2023c). The main drivers of food insecurity beyond conflict are high international food and fuel prices and the devaluation of the national currency.

Between 2014−2016 and 2020−2022, the prevalence of moderate or severe food insecurity (Figure 8) more than doubled in Mauritania. It increased significantly in Tunisia, Yemen, and Libya. The major driver behind the worrying multiplication of food

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5   Hunger hotspots and "acute food insecurity" refers to the indicator of the Integrated Food Security Phase Classification (IPC/CH). For more details see for example page 2 of FAO-WFP, 2023.

insecurity in Lebanon is the economic-social crisis. The unfolding economic and financial crisis started in October 2019 and has been further exacerbated by the triple economic impact of the COVID-19 outbreak, the massive Port of Beirut explosion in August 2020, and the soaring food prices since the beginning of the war in Ukraine. Its nominal food price inflation was the highest in the world recently, for example, at 350 percent from January 2023 to April 2023 (Gatti *et al.,* 2023). Between September and December 2022, 37 percent of the total population was estimated to be in acute food insecurity situations[6] (IPC, 2022b). In Mauritania, high food prices continue to worsen the food security situation, while flooding in 2022, has further aggravated the conditions of vulnerable households. In addition, as of November 2022, the country hosted over 100 000 refugees, mainly from Mali (FAO, 2023). The pandemic generated spikes in food insecurity in Morocco and Tunisia. Tunisia is experiencing a deep political and economic crisis, furthermore, three years of drought have dried up Tunisian reservoirs, threatening harvests (FAO, 2022c). Morocco has been in a drought since 2022. In addition, many countries in the region heavily depend on imported foodstuff and fertilizers from the Russian Federation and Ukraine, including wheat as a staple food, which makes the region vulnerable to the price and supply shock effects of the war in Ukraine. In 2021 the Russian Federation and Ukraine together accounted for about 75 percent of the total wheat and wheat flour imports of Egypt and Lebanon, close to 40 percent in Tunisia, more than 30 percent in Jordan and around 20 percent in Morocco (FAO, 2022a).

Moderate or severe food insecurity was the lowest in high-income countries, such as the United Arab Emirates (9.8 percent), Kuwait (10.9 percent) and Saudi Arabia (16.7 percent) in 2020-2022, and it decreased in these countries since 2014–2016, in Saudi Arabia significantly, by 24.4 percent.

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6   Hunger hotspots and "acute food insecurity" refers to the indicator of the Integrated Food Security Phase Classification (IPC/CH). For more details see for example page 2 of FAO-WFP, 2023.

FIGURE 9

PREVALENCE OF MODERATE OR SEVERE FOOD
INSECURITY BY SEX (PERCENT) (2022)
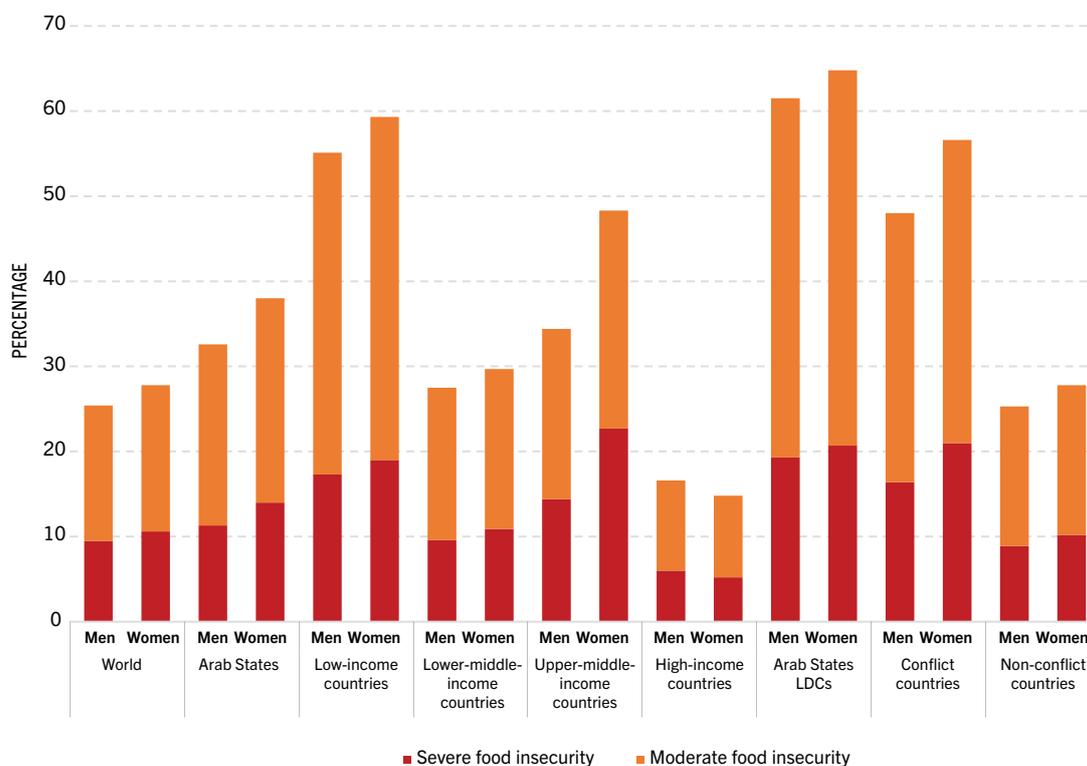
■ Severe food insecurity   ■ Moderate food insecurity

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 6

PREVALENCE OF FOOD INSECURITY BY SEX (PERCENT)

	Severe food insecurity						Moderate or severe food insecurity					
	Men			**Women**			**Men**			**Women**		
	2019	**2020**	**2022**	**2019**	**2020**	**2022**	**2019**	**2020**	**2022**	**2019**	**2020**	**2022**
World	7.9	9.1	9.5	8.6	10.3	10.6	22.1	25.4	25.4	23.7	28.0	27.8
Arab States	9.5	10.3	11.3	11.2	11.7	14.0	28.6	32.3	32.6	33.0	35.1	38.0
Low-income countries	15.1	16.8	17.3	16.3	18.2	19.0	45.4	51.5	55.1	47.9	54.8	59.3
Lower-middle-income countries	6.3	7.1	9.6	7.2	7.6	10.9	22.5	26.2	27.5	26.9	26.1	29.7
Upper-middle-income countries	15.7	15.0	14.4	20.4	18.8	22.7	36.3	40.2	34.4	41.8	46.2	48.3
High-income countries	6.9	7.1	6.0	7.0	7.2	5.2	19.2	19.5	16.6	18.2	18.5	14.8
Arab States LDCs	16.5	18.5	19.3	17.5	19.7	20.7	49.7	56.3	61.5	51.5	58.7	64.8
Conflict countries	15.7	16.0	16.4	18.8	18.9	21.0	43.2	47.9	48.0	47.3	53.2	56.6
Non-conflict countries	6.8	7.7	8.9	7.3	7.9	10.2	22.1	25.2	25.3	25.6	25.4	27.8

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. https://www.fao.org/faostat/en/#data/FS

The prevalence of food insecurity was higher among women than among men, both globally and in the Arab region (Figure 9 and Table 6). Worldwide, the gender gap in moderate or severe food insecurity between men and women was 2.4 percentage points, and in severe food insecurity 1.1 percentage points in favour of men in 2022. In the Arab States, the gender gap is higher in moderate or severe food insecurity5.4 percentage points in 2022.

In the Arab region, food insecurity was in all income categories higher for women than for men, except for high income countries. The gender gap in favour of men was the highest in upper-middle-income countries: 13.9 percentage points for moderate food insecurity and 8.3 percentage points for severe food insecurity. In high-income countries, the gender gap works in favour of women: for moderate food insecurity, the gap was 1.8 percentage points, and for severe food insecurity 0.8 percentage point.

CHAPTER 2
SUSTAINABLE DEVELOPMENT GOAL 2.2: MALNUTRITION

Key messages

- The Arab region continued to suffer from multiple forms of malnutrition. The prevalence of stunting among children under 5 years of age was 19.9 percent in 2022. The prevalence of overweight (9.5 percent) among children under 5 years of age and the prevalence of anaemia among women aged 15 to 49 years were higher than the world average in 2022.

- Arab LDCs and low-income countries had the highest level of stunting, 31.2 percent and 30.5 percent, respectively. Prevalence of stunting in conflict countries (26.5 percent) was almost two times higher than in non-conflict countries (14.7 percent). High-income countries had the lowest prevalence of stunting (10.8 percent) in 2022. The region is off-track in meeting the intermediate SDG 2.2.1 or WHA target, reducing the prevalence of stunting by 40 percent by 2025 (from 2012 levels). Child stunting decreased only by 16.0 percent between 2012 and 2022, from 23.7 percent to 19.9 percent.

- Wasting was 3.0 percent in lower-middle-income countries, 2.4 percent in upper-middle-income countries, 4.7 percent in high-income countries, and 3.2 percent in non-conflict countries. Low data availability prevented the calculation of average wasting values for the Arab States, low-income countries, Arab States LDCs, and conflict countries. However, as wasted children are more likely to live in low- or lower-middle-income countries, wasting was probably higher in these country groups.

- The prevalence of overweight among children under the age of 5 was highest in lower-middle-income countries (14.4 percent), followed by high-income countries (9.5 percent) and upper-middle-income countries (8.7 percent), although the differences are non-significant. Child overweight was the lowest in Arab LDCs (2.4 percent) and low-income countries (3.6 percent). Overweight among children in conflict countries was almost a third of non-conflict countries. Overweight more than doubled among high-income countries between 2000 and 2022. Most Arab States are far from achieving the 2030 target of less than 3 percent.

- The prevalence of anaemia among women aged 15 to 49 years was higher in the Arab States (33.3 percent) than the world average (29.9 percent). Anaemia was the highest in Arab LDCs (45.9 percent) and in low-income countries (43.9 percent), and it was the lowest in high-income countries (27.1 percent) in the Arab States. The reduction in the prevalence of anaemia in the Arab States (-12.9 percent) was three times higher than the global average (-4.2 percent) between 2000 and 2019.

Besides food security, nutrition is also central to fulfilling the 2030 Agenda for Sustainable Development. This report assesses regional levels and trends for six global nutrition targets that were endorsed by the World Health Assembly (WHA) in 2012 to be achieved by 2025, for which extended 2030 targets were subsequently proposed by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). Four out of the six indicators were also selected to monitor progress towards SDG Target 2.2, namely stunting, wasting and overweight in children under 5 years of age and anaemia in women aged 15 to 49 years. In addition, this report addresses the WHA target to halt the rise in adult obesity, which was adopted as part of the Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) in 2013 (FAO, 2022a).

This section reports on four global nutrition indicators: **stunting**, **wasting** and **overweight** in children under 5 years of age, and **anaemia** in women aged 15 to 49 years.

2.1. STUNTING AMONG CHILDREN UNDER 5 YEARS OF AGE

Stunting is defined as low height-for-age. It is the result of chronic or recurrent undernutrition, usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care in early life. Stunting prevents children from reaching their physical and cognitive potential. The consequences of child stunting are both immediate and long term and include increased morbidity and mortality, poor child development and learning capacity, increased risk of infections and non-communicable diseases. Furthermore, stunted children who experienced rapid weight gain after 2 years have an increased risk of becoming overweight or obese later in life (Soliman *et al.,* 2021, WHO, 2014b).

FIGURE 10

PREVALENCE OF STUNTING AMONG CHILDREN UNDER
5 YEARS OF AGE IN THE ARAB STATES BY SUBREGION
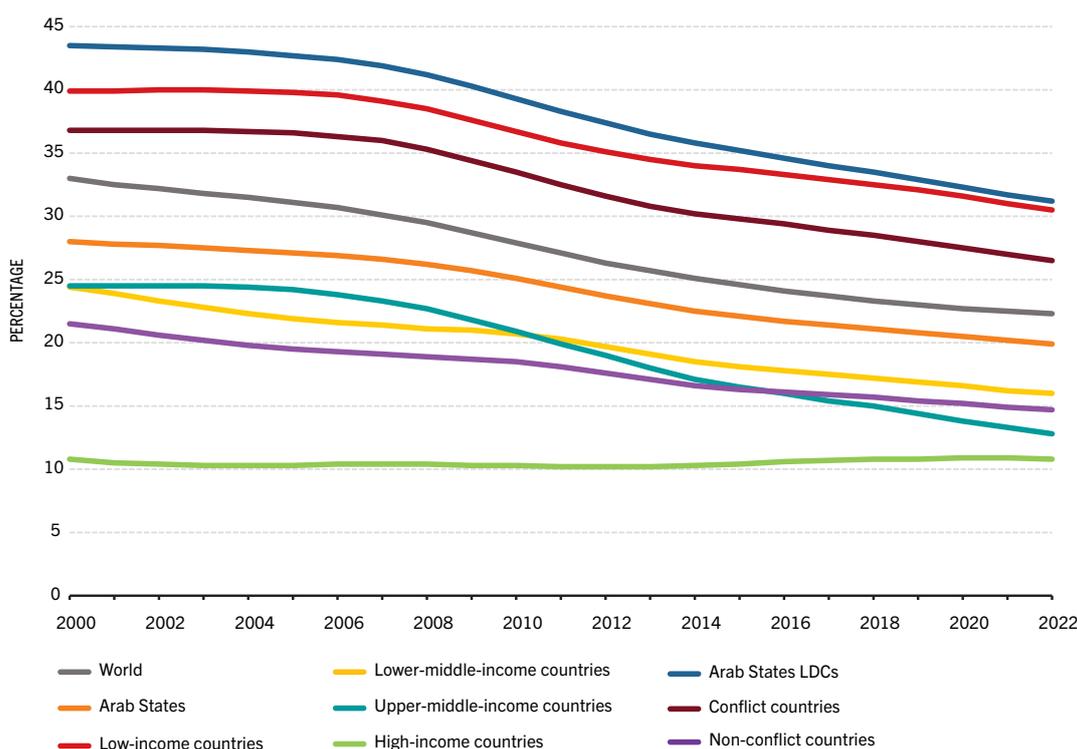
Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

TABLE 7

PREVALENCE OF STUNTING AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2000	2005	2010	2012	2015	2020	2022
World	**33.0**	**31.1**	**27.9**	**26.3**	**24.6**	**22.7**	**22.3**
Arab States	28.0	27.1	25.1	23.7	22.1	20.5	19.9
Low-income countries	39.9	39.8	36.7	35.1	33.7	31.6	30.5
Lower-middle-income countries	24.4	21.9	20.7	19.7	18.1	16.6	16.0
Upper-middle-income countries	24.5	24.2	20.9	19.0	16.5	13.8	12.8
High-income countries	10.8	10.3	10.3	10.2	10.4	10.9	10.8
Arab States LDCs	43.5	42.7	39.3	37.4	35.2	32.3	31.2
Conflict countries	36.8	36.6	33.5	31.6	29.8	27.5	26.5
Non-conflict countries	21.5	19.5	18.5	17.6	16.3	15.2	14.7

Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition).* [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

The prevalence of stunting in children under the age of 5 was 19.9 percent in the region in 2022, 10.8 percent (2.4 percentage points) below the world average of 22.3 percent (Figure 10, Table 7). Both globally and within the Arab States, rich economies tend to have lower levels of stunting than poorer ones (World Bank, 2023). Furthermore, stunted children are more likely to live in poorer households reside in rural areas and have mothers with no formal education (FAO, IFAD, UNICEF, WFP and WHO, 2022). In the Arab region, Arab LDCs (31.2 percent), low-income countries (30.5 percent) and conflict countries (26.5 percent) had the highest level of stunting, above the regional average of 19.9 percent. Stunting was the highest (Figure 11) in 2022 in conflict-hit countries, such as Libya (52.2 percent), the Sudan (36.0 percent), Yemen (35.1 percent), and the Syrian Arab Republic (25.4 percent). Lower-middle-income countries (16.0 percent), non-conflict countries (14.7 percent) upper-middle-income countries (12.8 percent), and high-income countries (10.8 percent) had lower levels of child stunting than the average of Arab States. Stunting was the lowest in Qatar (4.8 percent), Bahrain (5.0 percent), and Jordan (6.6 percent).

Significant progress has been made in reducing stunting among children under 5 years of age worldwide and in the region between 2000 and 2022 as Figure 10 and Table 6 show. In this period, stunting decreased by around a third (10.7 percentage points) globally and in the Arab States (8.1 percentage points); however, the reduction has been slower more recently. Stunting decreased the fastest in upper-middle-income countries, where it was almost halved. In lower-middle-income countries and non-conflict countries stunting also decreased faster than the regional average. In Arab LDCs, conflict countries and low-income countries stunting decreased slower than the regional average. In high-income countries, stunting remained at a low level of around 10.8 percent during 2000 and 2022.

FIGURE 11
PREVALENCE OF STUNTING AMONG CHILDREN
UNDER 5 YEARS OF AGE IN THE ARAB STATES BY
COUNTRY AND SUBREGION
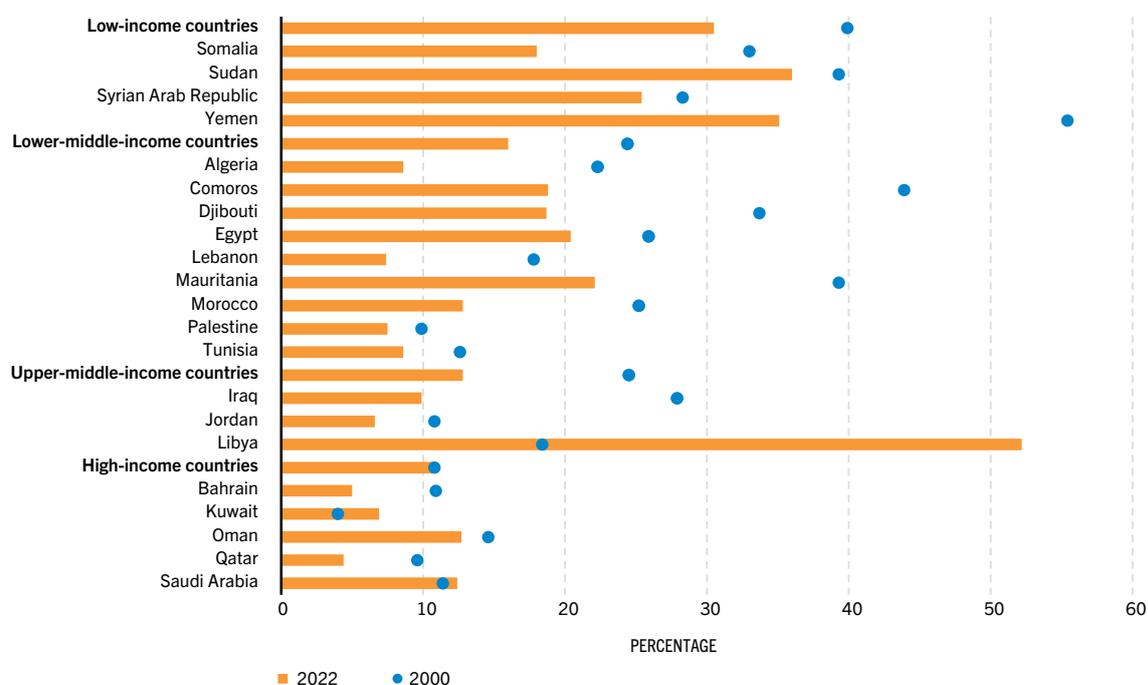
Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

Figure 11 also shows the trends in the prevalence of stunting among children under 5 years of age by country and subregion between 2000 and 2022. We can see significant reductions in child stunting across all income categories. Stunting decreased by more than half in Algeria, Bahrain, Comoros, Iraq, Lebanon and Qatar. On the contrary, stunting in this period more than doubled in Libya and almost doubled in Kuwait.

However, overall, the region is off-track in meeting the intermediate Target of SDG 2.2.1 (WHO, 2014a), reducing the prevalence of stunting by 40% by 2025 (from the baseline 2012 levels). Child stunting decreased only by 16.0 percent between 2012 and 2022 from 23.7 percent to 19.9 percent. In addition, the gains made in reducing the prevalence of child stunting by almost one-third (28.9) in the previous two decades (2000-2022) are under threat by the triple crises of climate, conflict and the economic repercussions of the COVID-19 pandemic and the war in Ukraine, combined with growing inequalities. High food inflation persists in the region in 2023 from 2022, when global food prices hit record levels, causing many local currencies to depreciate, further inflating prices[7]. In addition, higher food prices impact the poor more because they spend a larger share of income on food. According to some studies, there is a direct correlation between the increase of food price inflation and the rise in the risk of under-age-five stunting[8]. Thus, the food price increase in the region is expected to slow down further or may

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7   Inflation was 8.8 percent in 2022 and 6.6 percent in 2023 (IMF, 2023).

8   According to Woldemichael *et al*. (2022), a 1 percentage point higher month-to-month food inflation rate while an individual is in utero increases the risk of under-age-five stunting by 0.0046 probability point.

even turn the downward trend in reducing child stunting. For example, the World Bank estimates that the increase in food prices between March and June 2022 may have caused an additional 200 000 to 285 000 newborns to be stunted (Gatti *et al.,* 2023).

In 2012, WHO adopted a resolution on maternal, infant and young child nutrition that included a global target to reduce the number of stunted children under the age of five by 40 percent until 2025 (WHO, 2012). Persistent food price inflation and decreasing incomes make it less likely that the region will meet this target.

2.2. WASTING AMONG CHILDREN UNDER 5 YEARS OF AGE

Wasting — a lethal form of malnutrition — is defined as low weight-for-height. In other words, children with wasting are dangerously thin. It often indicates recent and severe weight loss, although it can also persist for a long time. It usually occurs when a person has not had food of adequate quality and quantity and/or they have had frequent or prolonged illnesses (WHO, 2023a). Wasting in children compromises immunity and is associated with a higher risk of death from otherwise common childhood illnesses such as diarrhoea and infections if not treated properly. Thus, wasting is considered an indicator of serious child health problems.

FIGURE 12

PREVALENCE OF WASTING AMONG CHILDREN UNDER 5 YEARS OF AGE IN THE ARAB STATES BY SUBREGION (2022)
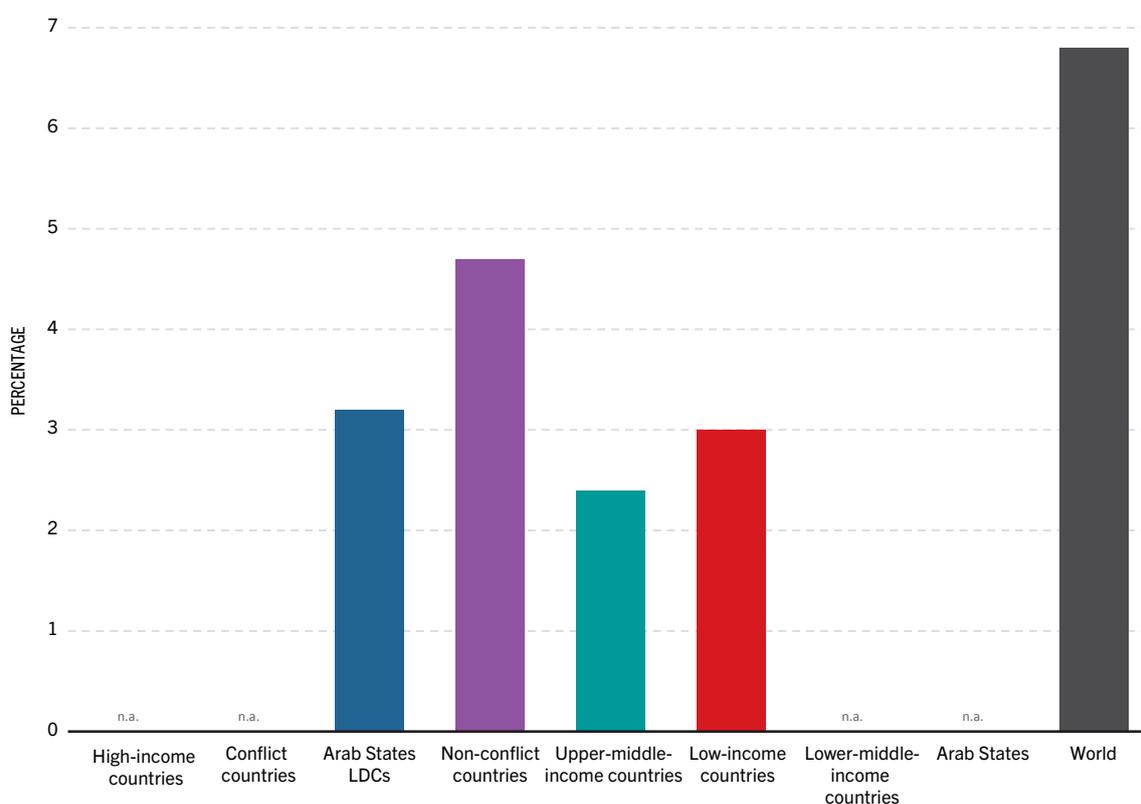
Note: The aggregates for Arab States, low-income countries, Arab States LDCs and conflict countries are not calculated due to low country and population coverage.

Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

TABLE 8

PREVALENCE OF WASTING AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2022
World	**6.8**
Arab States	n.a.
Low-income countries	n.a.
Lower-middle-income countries	3.0
Upper-middle-income countries	2.4
High-income countries	4.7
Arab States LDCs	n.a.
Conflict countries	n.a.
Non-conflict countries	3.2

Note: The aggregates for Arab States, low-income countries, Arab States LDCs and conflict countries are not calculated due to low country and population coverage.

Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

The world average for the prevalence of wasting among children under 5 years of age was 6.8 percent in 2022 (Figure 12, Table 8). Wasting was 3.0 percent in lower-middle-income countries, 2.4 percent in upper-middle-income countries, 4.7 percent in high-income countries, and 3.2 percent in non-conflict countries. There is a negative correlation between the level of development and wasting, implying that wasting declines as development increases (World Bank, 2023). Wasted children are more likely to live in low- or lower-middle-income countries and reside in poorer households (FAO, IFAD, UNICEF, WFP and WHO, 2022). Thus, wasting in low-income countries, and Arab LDCs was probably higher than in high- and middle-income countries, as was the case in 2022.

FIGURE 13

PREVALENCE OF WASTING AMONG CHILDREN UNDER 5 YEARS OF AGE IN THE ARAB STATES BY COUNTRY AND SUBREGION (LATEST YEAR AVAILABLE FROM 2015 TO 2022)
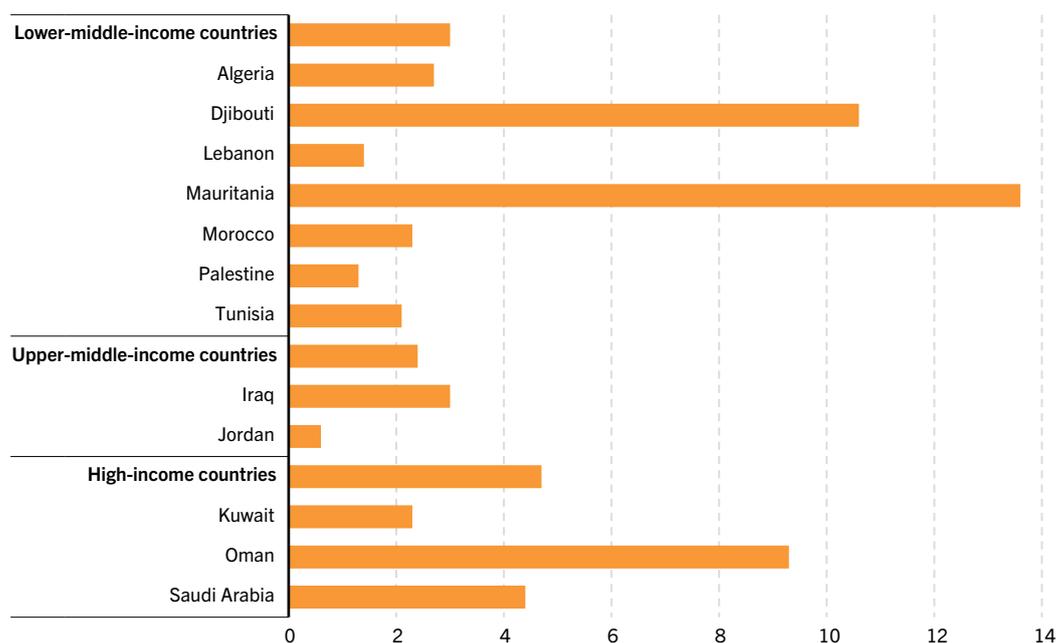
Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

Mauritania (13.6 percent) and Djibouti (10.6 percent) have the highest prevalence of wasting, while Jordan (0.6 percent), Palestine (1.3 percent) and Lebanon (1.4 percent) have the lowest prevalence of wasting among Arab States (Figure 13). Sustainable Development Goal (SDG) Target 2.2. incorporated the WHA target to reduce the proportion of children suffering from wasting to below 5 percent by 2025 and below 3 percent by 2030.

2.3. OVERWEIGHT AMONG CHILDREN UNDER 5 YEARS OF AGE

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health throughout the life cycle. Among adults, obese people have higher rates of mortality due to an increased risk of NCDs such as cardiovascular disease, cancer and diabetes. (WHO, 2021). Overweight and obesity are complex and multifaceted problems. While genetics can increase an individual's susceptibility to overweight, it cannot explain population-level increases over time. Intrauterine growth, infant feeding, and eating habits during preschool are significant determinants of overweight and obesity during adulthood (WHO, 2014c; FAO *et al.,* 2019). Other key risk factors of obesity and overweight are an increased availability and intake of energy-dense foods that are high in fats and/or sugars, poor dietary practices, and an increase in physical inactivity (FAO *et al.,* 2018).

FIGURE 14

PREVALENCE OF OVERWEIGHT AMONG CHILDREN UNDER 5 YEARS OF AGE IN THE ARAB STATES BY SUBREGION
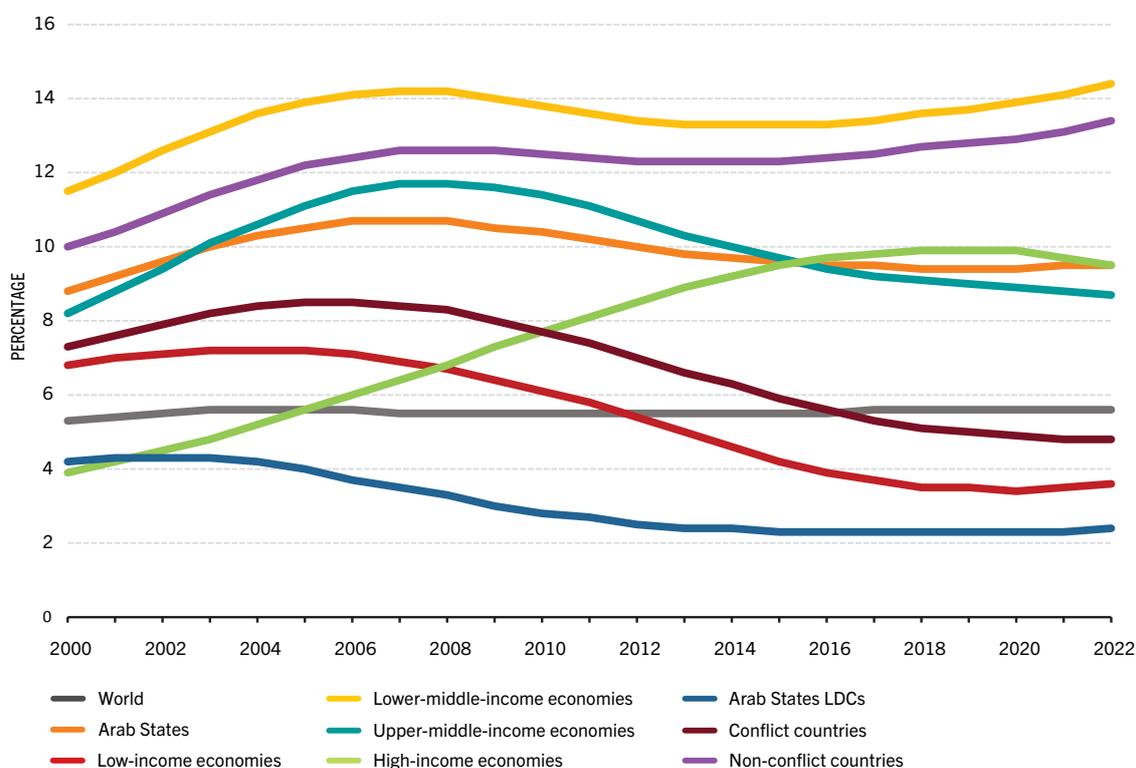
Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

TABLE 9

PREVALENCE OF OVERWEIGHT AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2000	2005	2010	2012	2015	2020	2022
World	**5.3**	**5.6**	**5.5**	**5.5**	**5.5**	**5.6**	**5.6**
Arab States	8.8	10.5	10.4	10.0	9.6	9.4	9.5
Low-income countries	6.8	7.2	6.1	5.4	4.2	3.4	3.6
Lower-middle-income countries	11.5	13.9	13.8	13.4	13.3	13.9	14.4
Upper-middle-income countries	8.2	11.1	11.4	10.7	9.7	8.9	8.7
High-income countries	3.9	5.6	7.7	8.5	9.5	9.9	9.5
Arab States LDCs	4.2	4.0	2.8	2.5	2.3	2.3	2.4
Conflict countries	7.3	8.5	7.7	7.0	5.9	4.9	4.8
Non-conflict countries	10.0	12.2	12.5	12.3	12.3	12.9	13.4

Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

In 2022, the prevalence of overweight among children under 5 years of age (Figure 14, Table 9) in the Arab States (9.5 percent) was 69.6 percent higher than the world average (5.6 percent). Overweight children globally are more likely to live in lower-middle- or upper-middle-income countries and reside in wealthier households (FAO *et al.,* 2022). In the Arab States, the prevalence of overweight children under the age of 5 years was by far the highest in lower-middle-income countries (14.4 percent), followed by high-income countries (9.5 percent) and upper-middle-income countries (8.7 percent). Overweight was the lowest in Arab LDCs (2.4 percent) and low-income countries (3.6 percent). Overweight among children in conflict countries (4.8 percent) was 35.8 percent lower than in non-conflict countries (13.4 percent).

Overweight among children increased more in the Arab States (8.0 percent) than globally (5.7 percent) between 2000 and 2022. Overweight increased significantly between 2000 and 2008, by 21.6 percent, since then it decreased by 11.2 percent until 2022 in the Arab States. Overweight increased drastically, more than doubled (143.6 percent increase) among high-income countries between 2000 and 2022.

There are several explanations for the high rates of overweight and obesity in most Arab States, including lifestyle changes that reduced people's physical activities and a nutrition transition that shifted dietary patterns and increased the intake of energy-dense but low-nutrient foods (IFPRI, 2020). The dietary and nutrition transition is fueled by rapid urbanization, economic development, and food consumption patterns that are partly characterized by increased intake of fats, sugar and processed foods of high energy density and minimal nutritional value.

FIGURE 15

PREVALENCE OF OVERWEIGHT AMONG CHILDREN
UNDER 5 YEARS OF AGE IN THE ARAB STATES BY
COUNTRY AND SUBREGION
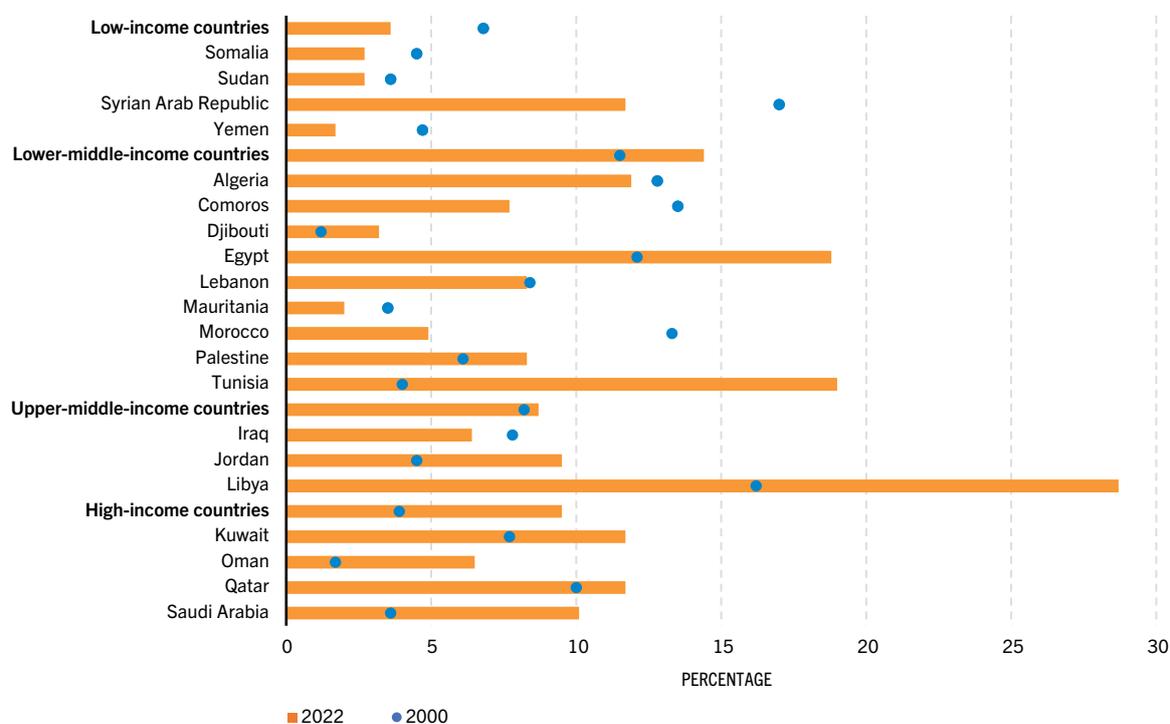
Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

At the country level, the prevalence of overweight among children (Figure 15) is the highest in Libya 28.7 percent, Tunisia (19.0 percent), and Egypt (18.8 percent). What is even more alarming is that the prevalence of overweight children increased sharply between 2022 and 2000 by 77.2 percent, by 375 percent, and by 55.4 percent in these countries respectively. Significant growth between 2000 and 2022 in overweight children can be observed also in Oman (+282.4 percent), Djibouti (+166.7 percent), and Saudi Arabia (+180.6 percent). In 2022, the lowest prevalence of overweight was in Yemen (1.7 percent), Mauritania (2.0 percent), and Somalia (2.7 percent) and Sudan (2.7 percent). However, the majority of Arab States are far from meeting the 2030 target of less than 3 percent.

The dietary energy supply from cereals in the region was significantly higher in the period of 2010−2019 than the world average and is particularly high in Egypt and Morocco. In addition, the second-highest dietary energy supply in the region comes from sugar, syrups and honey, which is 31 percent higher than the world average in the same period (FAO *et al.,* 2023). These might also contribute to high overweight/obesity in the Arab States.

Furthermore, there is evidence that food subsidies that are not targeted towards nutritious foods but to staple foods can increase obesity in low- and middle-income economies (Abay *et al.,* 2022). In low- and middle-income countries, market price controls

such as minimum or fixed price policies overwhelmingly target commodities like wheat, maize, rice, as well as sugar. While these policies have contributed to food security, they do not incentivize the production of nutritious foods and do not promote the consumption of healthy diets. In many countries, fiscal subsidies have increased the availability and reduced the price of staple foods and their derivatives, discouraging and making relatively more expensive the consumption of unsubsidized or less subsidized nutritious foods such as fruits, vegetables and pulses (FAO *et al.,* 2022).

In the Arab States, agricultural subsidies and food security policies have been implemented generally also in favour of staple food production, such as cereals (FAO *et al.,* 2023). According to IFPRI 2020, food subsidies in the Arab region could interact with the region's nutritional transition and associated high prevalence of overweight and prices of unhealthy diets are inversely associated with body weight outcomes. For example, there is evidence that food subsidies are associated with negative nutrition (both undernutrition and overnutrition) outcomes in Egypt because they incentivize overconsumption of staple foods, such as Baladi bread, rice, sugar, cooking oil (Ecker *et al.,* 2016). Latter study found that in urban areas of Egypt, the probability of child overweight and stunting increases with the subsidy levels. As the prices of the subsidized foods were fixed in Egypt, and the prices of free-market foods increased particularly rapidly during economic crises, the resulting loss in real incomes encouraged households to shift their diet toward more calorie-rich and micronutrient-poor foods. As food prices in the free market stay high, households tend to stick to unbalanced diets.

According to the World Bank (Gatti *et al.,* 2023), there is a positive correlation between the level of development and how well children reach Minimum Dietary Diversity (MDD)—the percentage of children between ages 6 and 23 months who have consumed foods and beverages from at least five out of eight defined food groups during the previous day.[9] A later study tested this correlation for 99 economies, including seven Arab States. Only two (Palestine and Tunisia) perform better in children reaching MDD; the other five (Algeria, Egypt, Iraq, Jordan, and Yemen) perform worse than their income peers in other regions of the world. These findings confirm that the challenge in the region is not only food security and sufficient calorie intake, but also diet quality and eating a variety of nutritious foods every day.

2.4. ANAEMIA AMONG WOMEN AGED 15 TO 49 YEARS

Anaemia increases the risk of infections and death, impairs cognitive performance, and causes extreme fatigue, poor pregnancy outcomes, loss of earnings, and poor growth and development. It is a strong indicator of overall health (WHO, 2023b).

---

9   The eight food groups included in the MDD indicator are: breast milk; grains, roots and tubers; legumes and nuts; dairy products (infant formula, milk, yogurt, cheese); flesh foods (meat, fish, poultry and liver/organ meats); eggs; vitamin-A rich fruits and vegetables; other fruits and vegetables (UNICEF, 2022; WHO *et al.*, 2008).

FIGURE 16

PREVALENCE OF ANAEMIA AMONG
WOMEN AGED 15 TO 49 YEARS IN THE
ARAB STATES BY SUBREGION
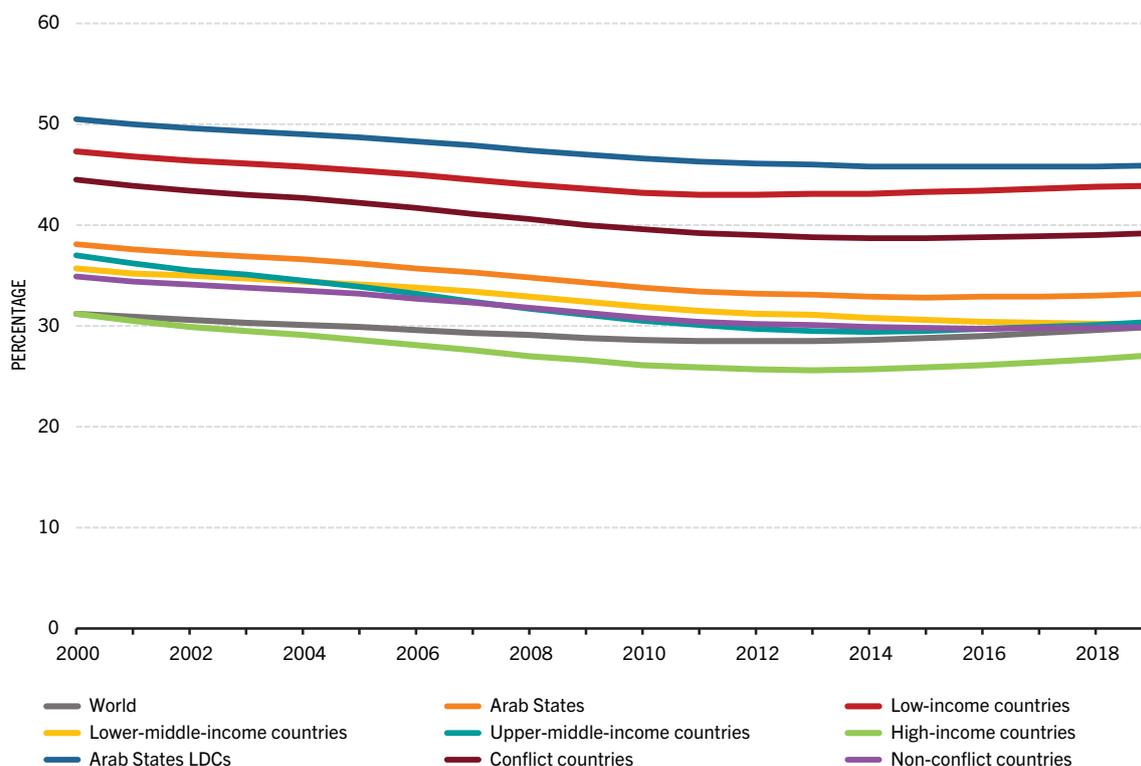
Source: Based on WHO. 2021. Global anaemia estimates, Edition 2021. In: *WHO | Global Health Observatory (GHO) data repository*. [Cited 20 April 2023]. www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children

TABLE 10

PREVALENCE OF ANAEMIA AMONG WOMEN AGED 15 TO 49 YEARS (PERCENT)

	2000	2005	2010	2012	2015	2019
World	**31.2**	**29.9**	**28.6**	**28.5**	**28.8**	**29.9**
Arab States	38.1	36.2	33.8	33.2	32.8	33.2
Low-income countries	47.3	45.4	43.2	43.0	43.3	43.9
Lower-middle-income countries	35.7	34.1	31.9	31.2	30.6	30.2
Upper-middle-income countries	37.0	33.9	30.5	29.7	29.5	30.4
High-income countries	31.2	28.6	26.1	25.7	25.9	27.1
Arab States LDCs	50.5	48.7	46.6	46.1	45.8	45.9
Conflict countries	44.5	42.2	39.6	39.0	38.7	39.2
Non-conflict countries	34.9	33.2	30.8	30.2	29.8	29.9

Note: The estimates refer to women aged 15 to 49 years, including pregnant, non-pregnant women and lactating women and were adjusted for altitude and smoking. WHO defines anaemia in pregnant women as a haemoglobin concentration <110 g/L at sea level, and anaemia in non-pregnant women and lactating women as a haemoglobin concentration <120 g/L.

Source: Based on WHO. 2021. Global anaemia estimates, Edition 2021. In: *WHO | Global Health Observatory (GHO) data repository*. [Cited 20 April 2023]. www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children

In 2019, the prevalence of anaemia among women aged 15 to 49 years (Figure 16, Table 10) was higher in the Arab States (33.3 percent) than the world average (29.9 percent). Overall, women suffering from anaemia are more likely to be residing in rural settings, in poorer households, and to have received no formal education (FAO *et al.,* 2022). Anaemia was the highest in Arab LDCs (45.9 percent) and in low-income countries (43.9 percent), and it was the lowest in high-income countries (27.1 percent) in the Arab States, but still considered a moderate public health problem (WHO, 2023b).

The reduction in the prevalence of anaemia in the Arab States (-12.9 percent) was three times higher than the global average (-4.2 percent) between 2000 and 2019. In this period, the prevalence of anaemia decreased significantly in upper-middle-income countries (-17.8 percent), lower-middle-income countries (-15.4 percent), and high-income countries (13.1 percent). In low-income countries and Arab LDCs, anaemia decreased by less than the regional average: by 7.2 percent and 9.1 percent, respectively.

FIGURE 17

PREVALENCE OF ANAEMIA AMONG WOMEN
AGED 15 TO 49 YEARS IN THE ARAB STATES
BY COUNTRY AND SUBREGION

Note: The estimates refer to women aged 15 to 49 years, including pregnant, non-pregnant women and lactating women and were adjusted for altitude and smoking. WHO defines anaemia in pregnant women as a haemoglobin concentration <110 g/L at sea level, and anaemia in non-pregnant women and lactating women as a haemoglobin concentration <120 g/L.

Source: Based on WHO. 2021. Global anaemia estimates, Edition 2021. In: *WHO | Global Health Observatory (GHO) data repository*. [Cited 20 April 2023]. www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children

Anaemia is a moderate (20.0-39.9 percent) to severe ($\geq$40.0 percent) (WHO, 2023b) public health problem in the region. In 2019, the prevalence of anaemia was the highest (Figure 17) in Yemen (61.5 percent), Mauritania (43.3 percent), and Somalia (43.1 percent), and the lowest in Kuwait (23.7 percent) and the United Arab Emirates (24.3 percent). Iraq (-27.6 percent), Oman (-23.0 percent) and Egypt (-20.3 percent) have achieved the most significant progress in reducing anaemia. On the contrary, anaemia has increased in Jordan (24.0 percent and in Lebanon (6.4 percent) significantly.

Prevention and swift treatment of anaemia was included in the UN Sustainable Development Goals (SDGs) with the intention of halving anaemia prevalence in women of reproductive age by 2030—a bold and progressive target. Unfortunately, Arab States have made no improvement in reducing anaemia; in 2019 the prevalence of anaemia was at the same level as in 2012. Only low-income countries have made some modest improvement (-3.2 percent) in the reduction of anaemia since 2012. Urgent action and new policies, such as iron supplementation and food fortification, are needed in the region if countries want to achieve some significant progress in reducing anaemia among women aged 15 to 49 years. For example, Oman has implemented a national iron and folic acid supplementation programme for pregnant women since 1997 in order to reduce the prevalence of spina bifida (Alasfoor *et al.,* 2010). By 2004, 81 percent of flour in Oman was fortified (FAO *et al.,* 2019). This may explain the significant reduction of anaemia in Oman since 2000 (Figure 17). World Bank estimates that achieving the target of reducing anaemia in women would require almost an additional 1 billion USD in total financing in this decade (Meera *et al.,* 2017).

MOROCCO
Fishmonger. Mellah Market.
© FAO/Alan Keohane

CHAPTER 3
ADDITIONAL WORLD HEALTH ASSEMBLY NUTRITION INDICATORS

This section assesses progress towards three additional WHA endorsed targets, i.e. **exclusive breastfeeding**, **low birthweight,** and **adult obesity**.

Key messages

- In 2016, in the Arab States, obesity among adults 18 years and older was 27.6 percent, more than double the global prevalence of 13.1 percent. Obesity in adults increased significantly in the Arab States between 2000 and 2016 by 10 percentage points. Adult obesity varied by income group with the highest prevalence in high income countries (33.0 percent). The lowest prevalence was in low-income countries (18.1 percent) and Arab States LDCs (11.8 percent).

- In 2012, in the Arab States, the rate of exclusive breastfeeding of infants under six months was 34.6 percent, below the world average of 37.0 percent. Among the subregions the highest rate was in lower-middle-income countries at 39.7 percent and the lowest rate in upper-middle-income countries at 19.9 percent.

- In the Arab States the prevalence of low birthweight was 13.3 percent in 2020, with only marginal decreases in the region and subregions since 2012. The subregions were all below the global estimate, with the highest prevalence in lower-middle-income countries at 13.8 percent, and the lowest prevalence in high-income-countries at 10.7 percent.

3.1. ADULT OBESITY

In the Arab States, obesity among adults 18 years and older was 27.6 percent in 2016, more than double the global prevalence of 13.1 percent (Figure 18 and Table 11). Levels of obesity vary by income-group, with the highest prevalence in high-income countries (33.0 percent); the highest prevalence among regions and subregions globally. This was followed by upper-middle-income countries (29.1 percent), lower-middle-income countries (28.3 percent), low-income countries (18.1 percent), and Arab States LDCs (11.8 percent) (Figure 18 and Table 11).

Obesity in adults increased significantly in the Arab States between 2000 and 2016 by 10.0 percentage points. Among the subregions, the largest increase was in lower-middle-income countries (10.6 percentage points), followed by high-income countries (10.3 percentage points), upper-middle-income countries (9.3 percentage points), low-income countries (6.7 percentage points), and Arab States LDCs (5.7 percentage points) (Table 11).

FIGURE 19 shows adult obesity increased in all countries of the region between 2000 and 2016. The prevalence of adult obesity was over 30 percent in 2016 in nine out of twenty countries: Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Qatar, Saudi Arabia and the United Arab Emirates. Kuwait had the highest prevalence of 37.9 percent. The prevalence of adult obesity was under 20 percent in Comoros, Djibouti, Mauritania, Somalia and Yemen. The lowest prevalence was seen in Comoros (7.8 percent) and Somalia (8.3 percent).

FIGURE 18

PREVALENCE OF OBESITY AMONG ADULTS
IN THE ARAB STATES BY SUBREGION
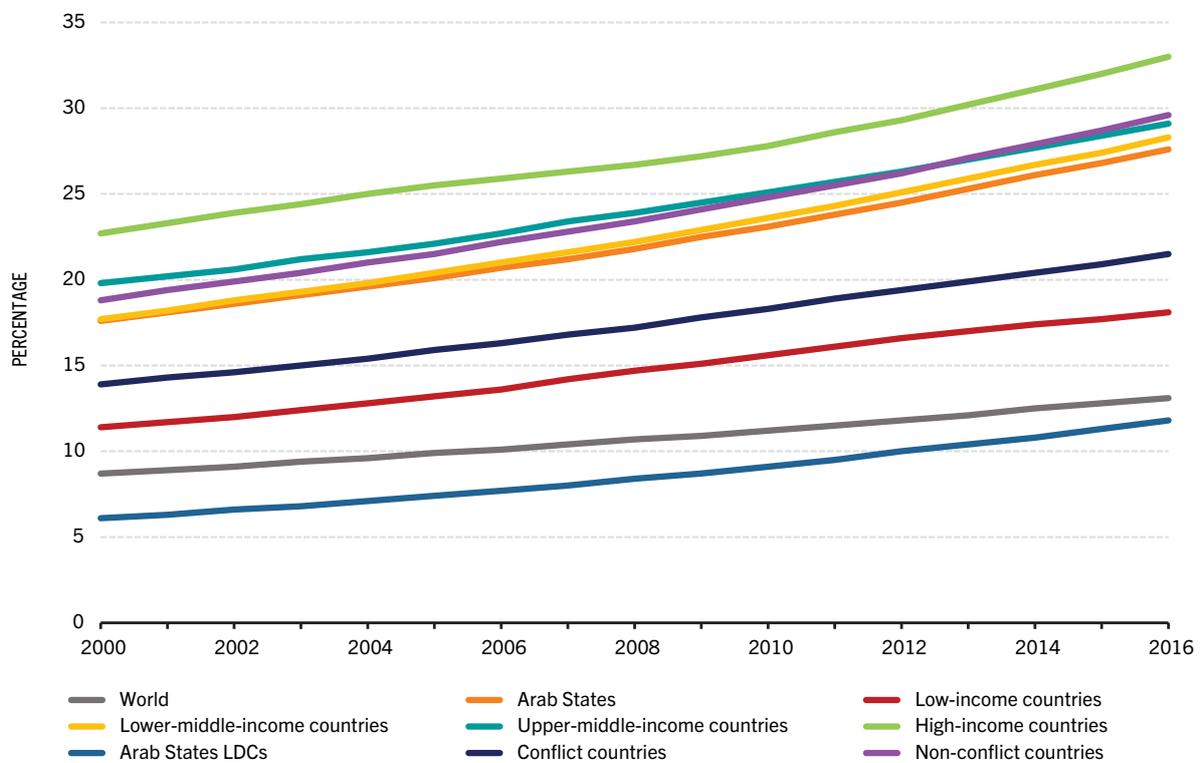
Legend:
- World
- Lower-middle-income countries
- Arab States LDCs
- Arab States
- Upper-middle-income countries
- Conflict countries
- Low-income countries
- High-income countries
- Non-conflict countries

Source: Based on WHO. 2020. Global Health Observatory (GHO) data repository. In: *WHO*. [Cited 28 April 2020]. https://apps.who.int/gho/data/node.main. A900A?lang=en

TABLE 11

PREVALENCE OF OBESITY AMONG ADULTS (PERCENT)

	2000	2005	2010	2012	2014	2015	2016
World	**8.7**	**9.9**	**11.2**	**11.8**	**12.5**	**12.8**	**13.1**
Arab States	17.6	20.1	23.1	24.5	26.1	26.8	27.6
Low-income countries	11.4	13.2	15.6	16.6	17.4	17.7	18.1
Lower-middle-income countries	17.7	20.4	23.6	25.1	26.7	27.4	28.3
Upper-middle-income countries	19.8	22.1	25.1	26.3	27.7	28.4	29.1
High-income countries	22.7	25.5	27.8	29.3	31.1	32.0	33.0
Arab States LDCs	6.1	7.4	9.1	10.0	10.8	11.3	11.8
Conflict countries	13.9	15.9	18.3	19.4	20.4	20.9	21.5
Non-conflict countries	18.8	21.5	24.8	26.2	27.9	28.7	29.6

Source: Based on WHO. 2020. Global Health Observatory (GHO) data repository. In: *WHO*. [Cited 28 April 2020]. https://apps.who.int/gho/data/node.main.
A900A?lang=en

FIGURE 19

PREVALENCE OF OBESITY AMONG
ADULTS IN THE ARAB STATES BY
COUNTRY AND SUBREGION
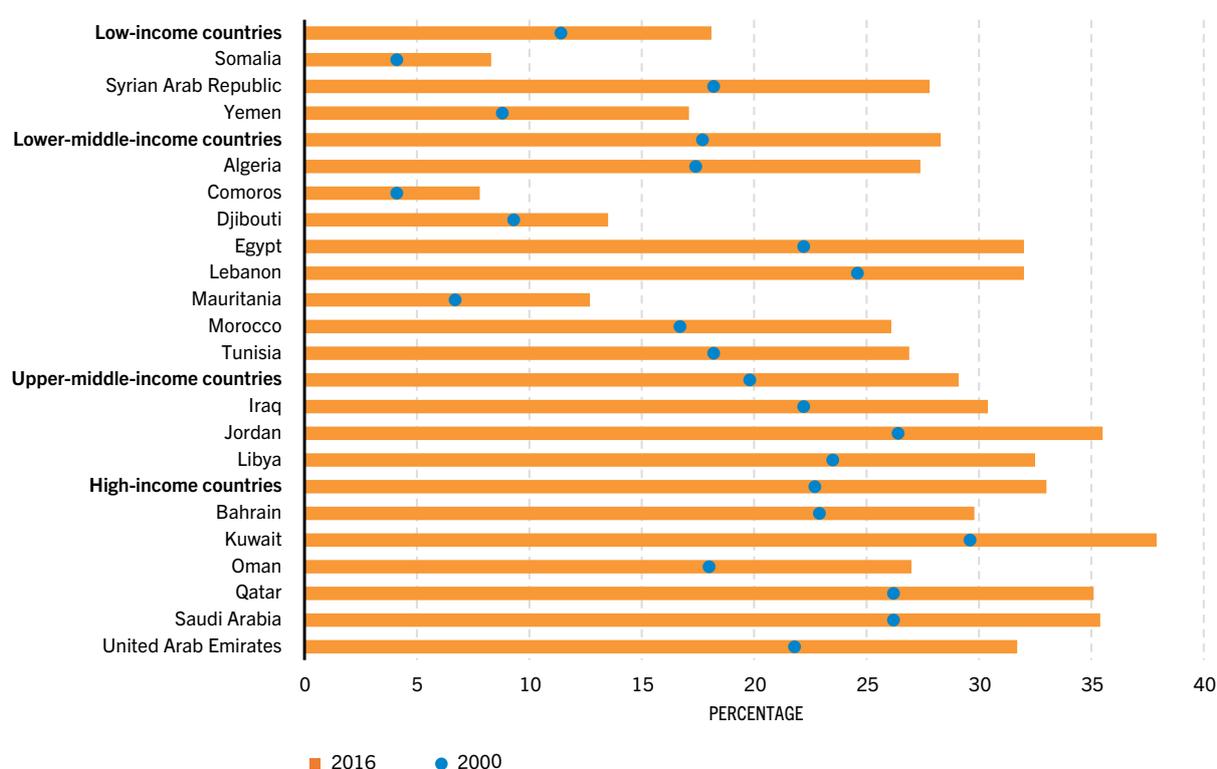
Source: Based on WHO. 2020. Global Health Observatory (GHO) data repository. In: *WHO*. [Cited 28 April 2020]. https://apps.who.int/gho/data/node.main.
A900A?lang=en

3.2. PREVALENCE OF EXCLUSIVE BREASTFEEDING DURING THE FIRST SIX MONTHS OF LIFE

As shown in Figure 20, in 2012 the rate of exclusive breastfeeding of infants under six months was 34.6, below the global prevalence of 37.0 percent, and below the World Health Assembly target of at least 50 percent exclusive breastfeeding for the first 6 months of life by 2025. Among the subregions the highest prevalence was in lower-middle-income countries, above the global estimate, at 39.7 percent, followed by low-income countries at 33.2 percent, Arab States LDCs at 29.4 percent and upper-middle-income countries at 19.9 percent (Table 12).

In the Arab States (Figure 21), for the latest period reported, the Sudan, with a prevalence of 54.6 percent of infants under six months of age exclusively breastfed in 2014, was the only country that has a prevalence above the WHA target of at least 50 percent, whereas the lowest prevalence was in Yemen at 9.7 percent in 2013. Five countries, in each of the subregions, have had a decrease or no change in rates of exclusive breastfeeding in the periods reported. Two countries, Mauritania and Somalia, had rates of increase above 20 percentage points.

FIGURE 20

PREVALENCE OF EXCLUSIVE BREASTFEEDING
AMONG INFANTS 0–5 MONTHS OF AGE IN THE
ARAB STATES BY SUBREGION

Source: Based on UNICEF. 2022. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2023]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/
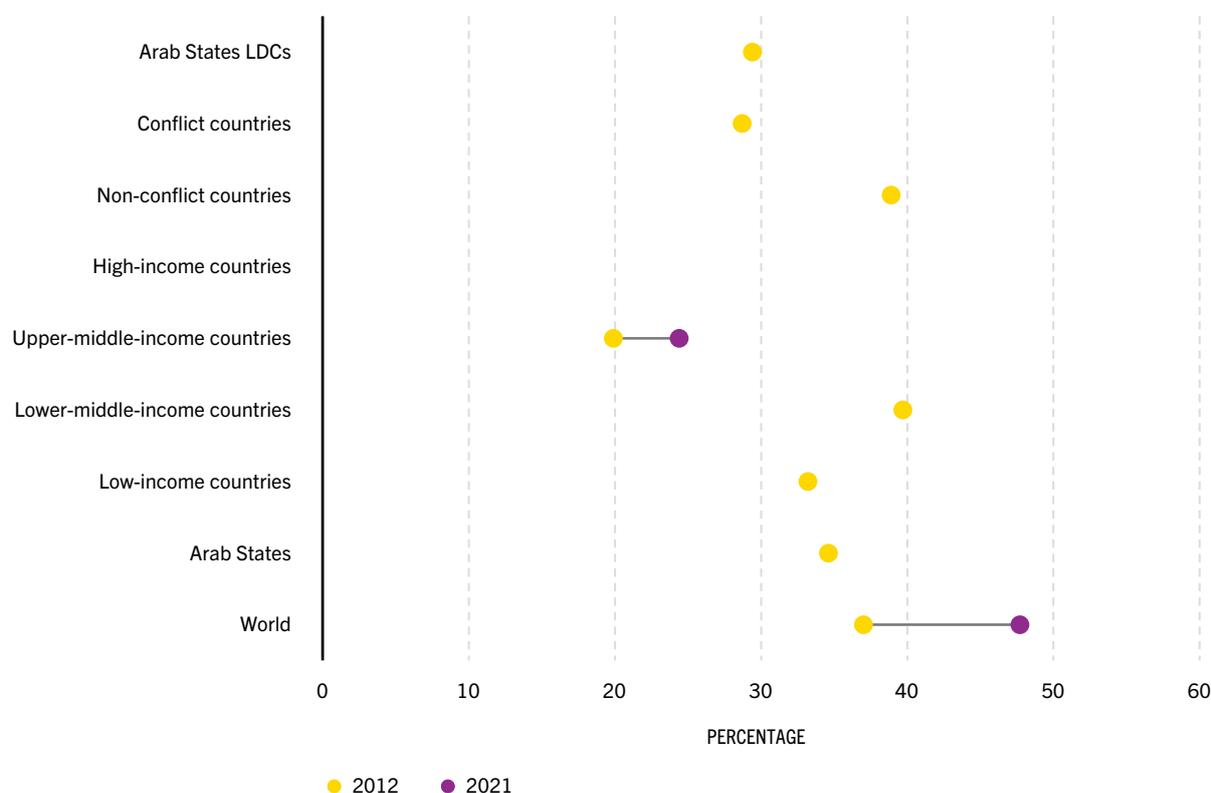
TABLE 12

PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS 0–5 MONTHS OF AGE (PERCENT)

Area	2012	2021
World	**37.0**	**47.7**
Arab States	34.6	n.a.
Low-income countries	33.2	n.a.
Lower-middle-income countries	39.7	n.a.
Upper-middle-income countries	19.9	24.4
High-income countries	n.a.	n.a.
Arab States LDCs	29.4	n.a.
Conflict countries	28.7	n.a.
Non-conflict countries	38.9	n.a.

Source: Based on UNICEF. 2022. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2023]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/

FIGURE 21

PREVALENCE OF EXCLUSIVE BREASTFEEDING
AMONG INFANTS 0–5 MONTHS OF AGE IN THE
ARAB STATES BY COUNTRY AND SUBREGION

Source: Based on UNICEF. 2022. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2023]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/
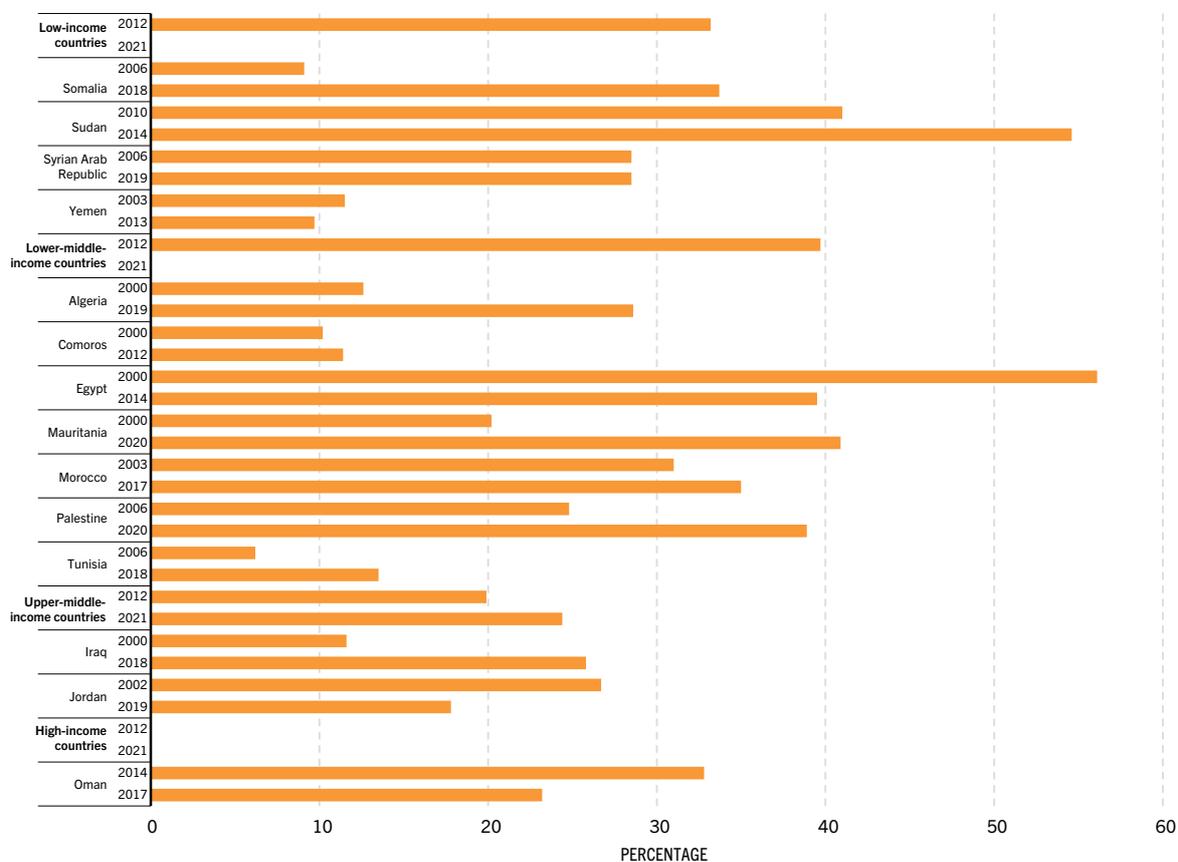
3.3. PREVALENCE OF LOW BIRTHWEIGHT

Low birth weight is defined by the World Health Organization as weight at birth less than 2500g, which can include preterm and full-term births. In 2020, the prevalence of low birthweight in the Arab States was 13.3 percent, slightly lower than the global prevalence of 14.7 percent. Nevertheless, with only 0.2 percentage point decrease between 2012 and 2020, the region has made little progress toward the World Health Assembly target to decrease low birthweight by 30 percent between 2012 and 2025.

Between 2012 and 2020 (Figure 22 and Table 13), the prevalence of low birthweight decreased in lower-middle-income countries by 0.1 percent. In all other subregions, the prevalence has increased, with the largest increase in upper-middle-income countries by 0.6 percent.

The prevalence of low birthweight in all subregions was below the global estimate, with the highest prevalence in lower-middle-income countries (13.8 percent), followed by low-income countries (13.7 percent), Arab States LDCs (13.7 percent), upper-middle income countries (12.2 percent), and high-income countries (10.7 percent) (Table 13).

Among countries (Figure 23), the highest prevalence of low birthweight was in Comoros (23 percent) and the lowest in Algeria (7.2 percent). Most countries made marginal progress in reducing the prevalence of low birthweight between 2012 and 2020, with decreases over 1 percentage point in Comoros (1.1 percentage points) and Morocco (1.3 percentage points). In contrast, the highest increase in prevalence of low birthweight was in Jordan (1.9 percentage points).

FIGURE 22

PREVALENCE OF LOW BIRTHWEIGHT IN
THE ARAB STATES BY SUBREGION
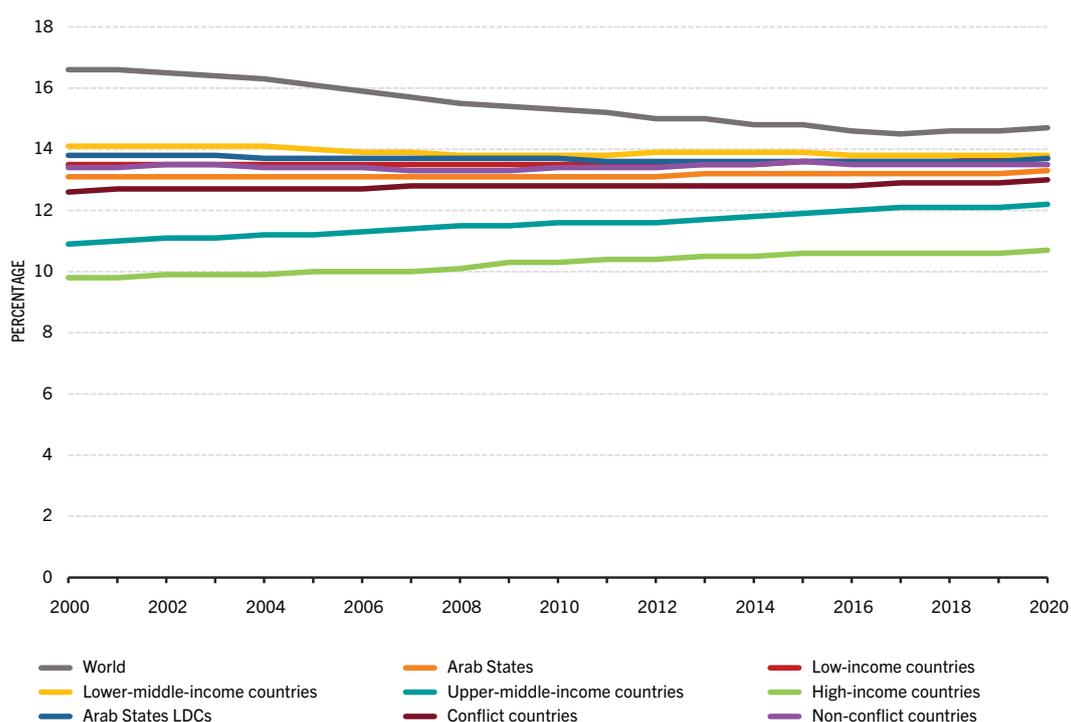
Legend:
- World
- Arab States
- Low-income countries
- Lower-middle-income countries
- Upper-middle-income countries
- High-income countries
- Arab States LDCs
- Conflict countries
- Non-conflict countries

TABLE 13

PREVALENCE OF LOW BIRTHWEIGHT (PERCENT)

	2000	2005	2010	2015	2019	2020
World	**16.6**	**16.1**	**15.3**	**14.8**	**14.6**	**14.7**
Arab States	13.1	13.1	13.1	13.2	13.2	13.3
Low-income countries	13.5	13.5	13.5	13.6	13.7	13.7
Lower-middle-income countries	14.1	14.0	13.8	13.9	13.8	13.8
Upper-middle-income countries	10.9	11.2	11.6	11.9	12.1	12.2
High-income countries	9.8	10.0	10.3	10.6	10.6	10.7
Arab States LDCs	13.8	13.7	13.7	13.6	13.6	13.7
Conflict countries	12.6	12.7	12.8	12.8	12.9	13.0
Non-conflict countries	13.4	13.4	13.4	13.6	13.5	13.5

Source: Based on UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 12 July 2023]. www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates

FIGURE 23

PREVALENCE OF LOW BIRTHWEIGHT IN THE
ARAB STATES BY COUNTRY AND SUBREGION
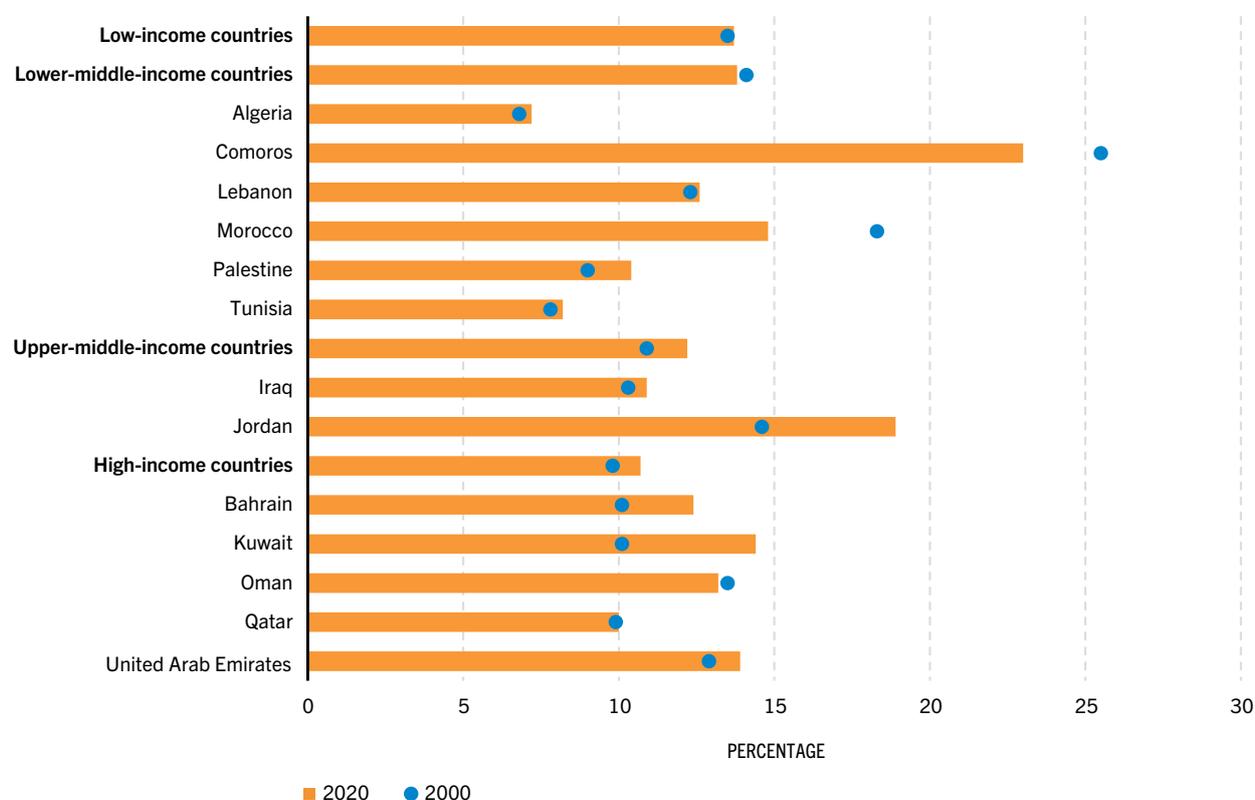
Source: Based on UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 12 July 2023].www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates
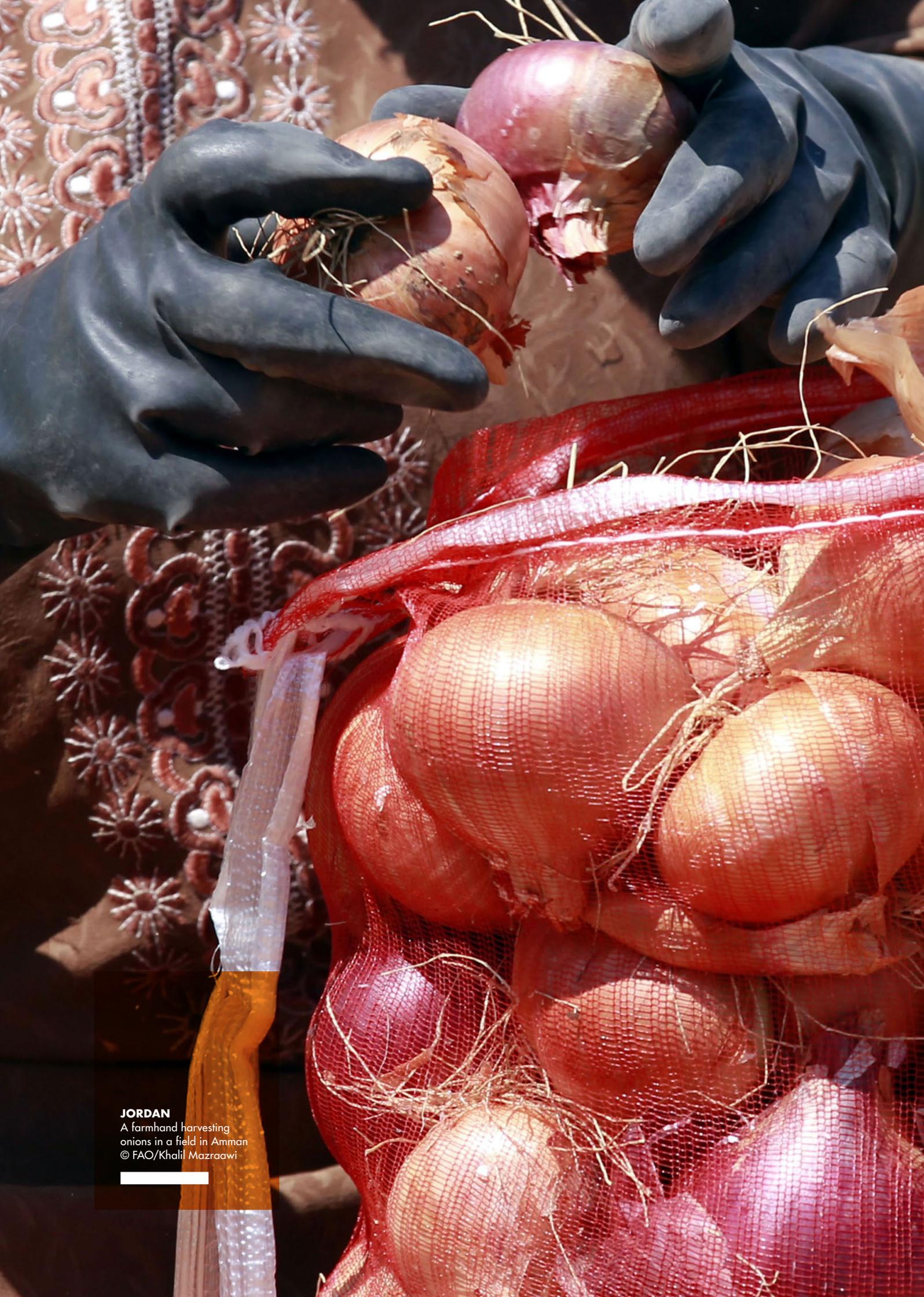
JORDAN
A farmhand harvesting
onions in a field in Amman
© FAO/Khalil Mazraawi

CHAPTER 4
UPDATES TO THE COST AND AFFORDABILITY OF A HEALTHY DIET

Key messages

■ The cost and affordability of a healthy diet continues to be challenging. Continued monitoring of these indicators will remain important in light of recent global shocks threatening food security (FAO, 2023c).

■ The cost of a healthy diet in the Arab States in 2021 was 3.55 PPP dollars per person per day, slightly lower than the global estimate of 3.66 PPP dollars.

■ Since 2017, the cost of a healthy diet in the Arab States has increased annually, with a 2.5 percent increase between 2020 and 2021. The highest increase was in high-income countries (6.4 percent), followed by lower-middle-income-countries (4.4 percent), and upper-middle-income countries (3.5 percent).

■ In 2021, 43.8 percent of the region's population or 141.6 million people, could not afford a healthy diet. In Arab LDCs, 82.9 percent of the population were unable to afford a healthy diet; nearly twice that of lower-middle-income countries (44 percent), and more than five times that of upper-middle-income countries (16.1 percent).

The indicators of cost and affordability of a healthy diet consider retail food prices and income distributions which provide evidence about people's economic access to the lowest-cost healthy diet. Continued monitoring of these indicators will remain important considering recent global shocks threatening food security (FAO, 2023c).

The cost of a healthy diet in the Arab States was 3.55 (purchasing power parity) PPP dollars per person per day in 2021, slightly lower than the global average of 3.66 PPP dollars per person per day (Table 14). Since 2017, the cost of a healthy diet in the Arab States increased annually, with a 2.5 percent increase between 2020 and 2021 (Table 14 and Figure 24). The highest increase was in high-income countries (6.4 percent), followed by lower-middle-income countries (4.4 percent), and upper-middle-income countries (3.5 percent).

In 2021, 43.8 percent of the region's population or 141.6 million people, could not afford a healthy diet. This is slightly higher than the global average of 42.2 percent. Lower-middle-income countries account for 66 percent of people unable to afford a healthy diet in the Arab States.

Within subregions, in Arab LDCs 82.9 percent of the population was unable to afford a healthy diet; nearly twice that of lower-middle-income countries (44 percent), and more than five times that of upper middle-income countries (16.1 percent).

As shown in Figure 25 and Table 15, between 2020 and 2021, despite the increase in cost, the number of people unable to afford a healthy diet in the Arab States decreased by 3.8 million people. This reduction more than offset the increase in unaffordability that occurred between 2019 and 2020 (2.8 million more people unable to afford), following the COVID-19 pandemic. This pattern was mainly driven by Arab States LDCs where unaffordability increased by 1.5 million people from 2019 to 2020 but declined by 2.7 million people from 2020 to 2021. The largest decreases between 2020 and 2021 was observed in Conflict countries, with a reduction of 3 million people unable to afford a healthy diet. This decrease compensated the increase in unaffordability occurred between 2019 and 2020. The Sudan contributed to this decrease with 2.8 fewer million people unable to afford a healthy diet (Table 28).

Despite this improvement, 4.1 million more people were unable to afford a healthy diet in the Arab States compared to 2017. The highest increase in the population unable to afford a healthy diet occurred between 2017 and 2018 (by 5.8 million people), and between 2019 and 2020 (by 2.8 million people). Between 2018 and 2019, the decrease of 0.7 million people unable to afford this diet was driven by lower-middle-income countries, while Arab States LDCs and Conflict countries registered increases in unaffordability (Table 15).

The percentage of the population that cannot afford a healthy diet differs greatly between countries and within subregions (FIGURE 26). Considering lower-middle-income countries in 2021, more than 50 percent of the population could not afford a healthy diet in Djibouti (65.3 percent), Egypt (61.6 percent), and Mauritania (62.4 percent), while in the Arab LDCs the highest level of unaffordability was registered in Sudan (85.4 percent) (Table 28). Nevertheless, 20 percent or less of the population was unable to afford a healthy diet in other lower-middle-income countries like in Morocco (17.7 percent), Palestine (20 percent) and Tunisia (18 percent). The countries with the lowest percentage of the population unable to afford a healthy diet were the United Arab Emirates (0.1 percent) and Jordan (7.1 percent).

FIGURE 24
CHANGE IN THE COST OF A HEALTHY DIET
IN THE ARAB STATES BY SUBREGION
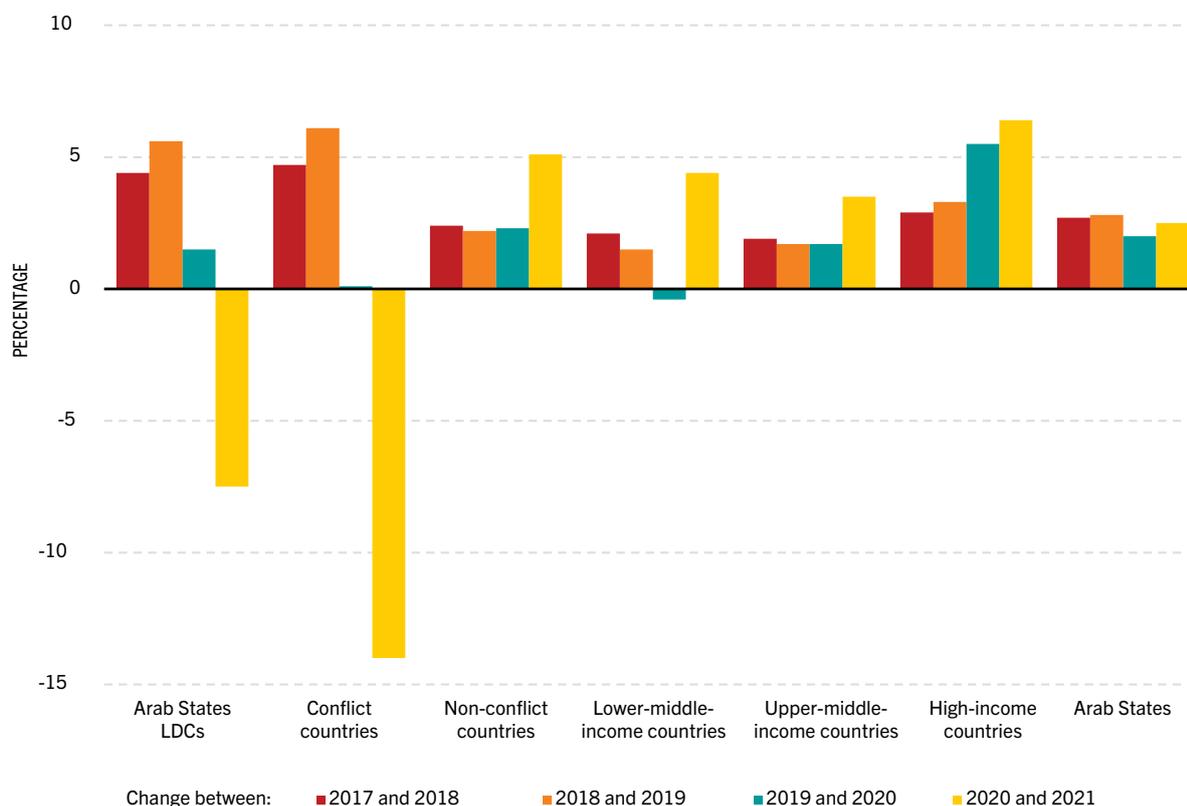
Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

TABLE 14
COST OF A HEALTHY DIET

	Cost (PPP dollars per person per day)					Change (percent)			
	2017	2018	2019	2020	2021	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021
World	**3.30**	**3.36**	**3.43**	**3.51**	**3.66**	**1.8**	**2.3**	**2.3**	**4.3**
Arab States	3.22	3.31	3.40	3.47	3.55	2.7	2.8	2.0	2.5
Low-income countries	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Lower-middle-income countries	3.29	3.35	3.40	3.39	3.54	2.1	1.5	-0.4	4.4
Upper-middle-income countries	3.40	3.46	3.52	3.58	3.70	1.9	1.7	1.7	3.5
High-income countries	3.02	3.11	3.21	3.38	3.60	2.9	3.3	5.5	6.4
Arab States LDCs	3.31	3.45	3.65	3.70	3.43	4.4	5.6	1.5	-7.5
Conflict countries	3.53	3.69	3.92	3.92	3.37	4.7	6.1	0.1	-14.0
Non-conflict countries	3.18	3.26	3.33	3.40	3.58	2.4	2.2	2.3	5.1

Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

FIGURE 25

CHANGE IN THE NUMBER OF PEOPLE UNABLE
TO AFFORD A HEALTHY DIET IN THE ARAB
STATES BY SUBREGION
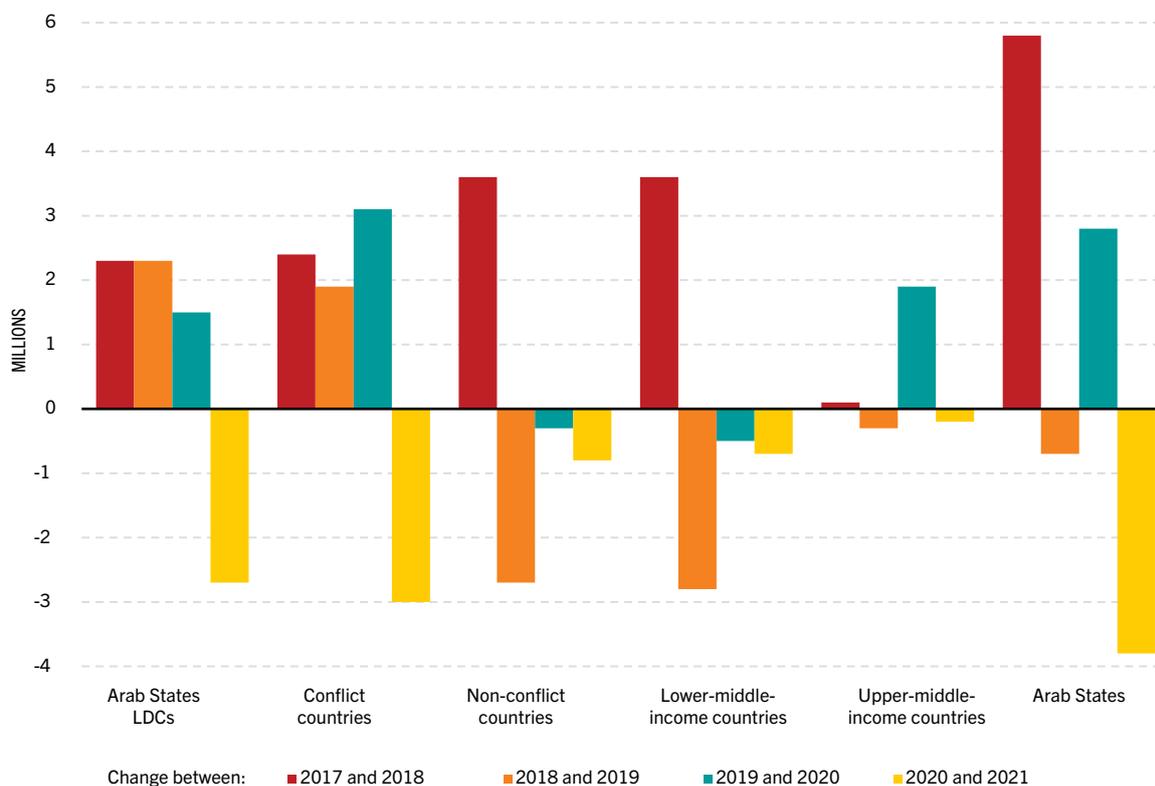
Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

TABLE 15

NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET (MILLIONS)

	Number					Change			
	2017	2018	2019	2020	2021	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021
World	**3 124.9**	**3 019.1**	**3 005.5**	**3 191.9**	**3 139.5**	**-105.8**	**-13.6**	**186.4**	**-52.4**
Arab States	137.5	143.3	142.6	145.4	141.6	5.8	-0.7	2.8	-3.8
Low-income countries	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Lower-middle-income countries	94.2	97.8	95.0	94.5	93.8	3.6	-2.8	-0.5	-0.7
Upper-middle-income countries	7.3	7.4	7.1	9.0	8.8	0.1	-0.3	1.9	-0.2
High-income countries	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Arab States LDCs	39.2	41.5	43.8	45.3	42.6	2.3	2.3	1.5	-2.7
Conflict countries	42.6	45.0	46.9	50.0	47.0	2.4	1.9	3.1	-3.0
Non-conflict countries	94.8	98.4	95.7	95.4	94.6	3.6	-2.7	-0.3	-0.8

Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

FIGURE 26
PERCENTAGE OF PEOPLE UNABLE TO AFFORD A
HEALTHY DIET IN THE ARAB STATES BY
COUNTRY AND SUBREGION
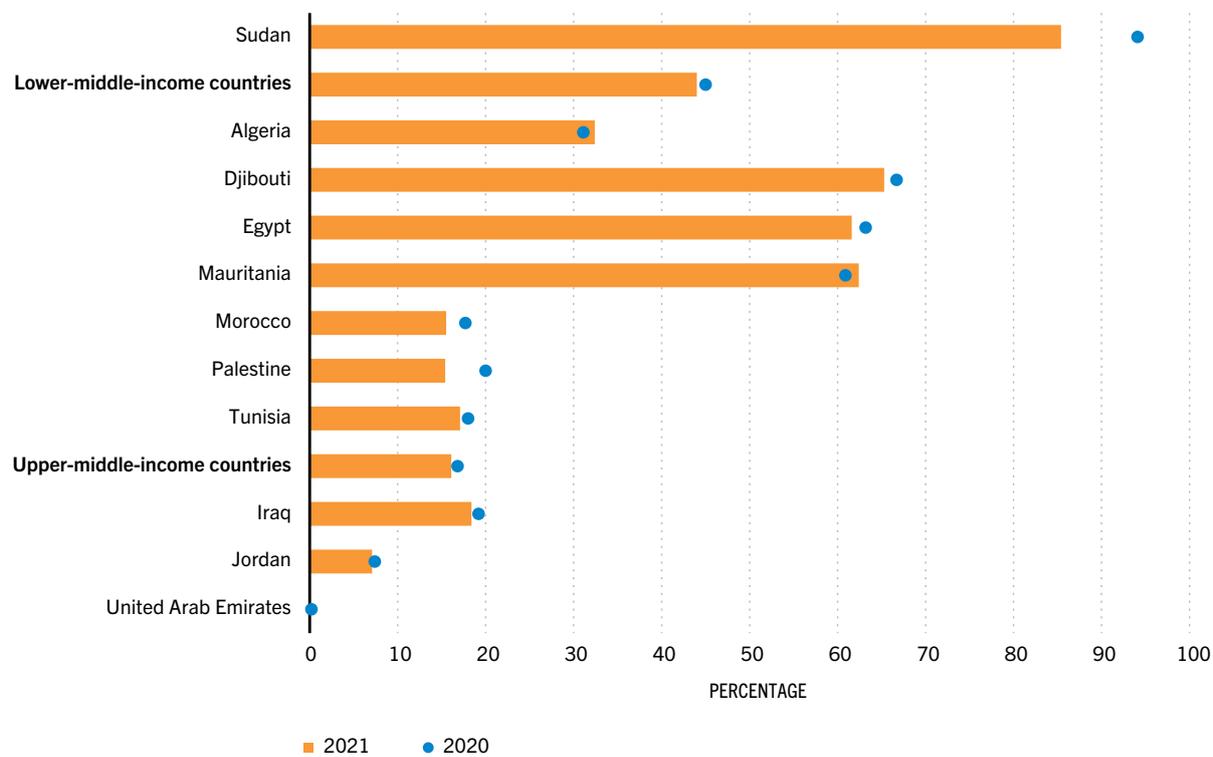
Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

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ANNEX I
DATA TABLES

PREVALENCE OF UNDERNOURISHMENT (PERCENT)

	2000–2002	2004–2006	2009–2011	2013–2015	2017–2019	2018–2020	2019–2021	2020–2022
World	12.9	12.0	8.8	7.8	7.7	8.2	8.7	9.2
Arab States	11.4	11.1	10.2	10.4	11.8	11.9	12.0	12.3
Low-income countries	28.2	28.0	26.6	22.7	27.6	27.3	26.6	26.5
Lower-middle-income countries	6.4	6.4	5.1	4.7	5.0	5.0	5.3	5.9
Upper-middle-income countries	16.3	13.8	11.7	12.9	13.9	14.7	15.3	16.1
High-income countries	5.5	5.3	7.5	5.1	4.3	4.1	3.7	3.3
Arab States LDCs	30.4	29.8	27.7	25.1	28.0	26.9	25.7	25.3
Conflict countries	24.3	22.9	21.5	20.4	24.0	23.7	23.2	23.1
Non-conflict countries	6.4	6.3	5.6	4.9	5.1	5.2	5.6	6.1
Algeria	8.1	6.7	4.3	2.7	<2.5	<2.5	<2.5	<2.5
Comoros	25.2	16.8	16.2	12.8	11.7	11.6	11.9	13.5
Djibouti	42.1	30.2	26.5	22.9	19.4	19.0	17.3	16.8
Egypt	5.2	6.4	5.1	5.5	6.3	6.3	6.4	7.2
Iraq	21.7	17.8	14.7	16.8	17.2	16.9	16.4	16.3
Kuwait	2.8	<2.5	<2.5	<2.5	2.6	2.6	<2.5	<2.5
Libya	3.5	4.7	7.1	5.4	7.1	7.7	7.9	8.4
Mauritania	8.2	9.1	7.0	6.5	6.9	7.0	7.5	8.7
Morocco	6.3	5.5	5.1	4.0	3.6	4.2	5.3	6.3
Oman	12.4	9.4	5.6	6.0	4.5	3.1	2.7	2.8
Saudi Arabia	5.4	4.9	8.3	5.5	4.7	4.6	4.3	3.8
Somalia	70.6	70.4	70.1	58.7	54.0	51.9	49.9	48.7
Sudan				9.3	11.5	11.3	11.6	11.9
Syrian Arab Republic	7.6	4.9	4.7	9.4	20.1	23.6	25.7	27.8
Tunisia	4.4	4.3	3.5	2.9	<2.5	<2.5	2.8	3.0
United Arab Emirates	3.1	7.6	7.4	4.7	3.8	3.4	2.7	<2.5
Yemen	26.2	27.3	25.1	32.9	41.1	38.9	36.0	34.5

Note: The values for 2020 to 2022 are projections.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 17

NUMBER OF UNDERNOURISHED PEOPLE (MILLIONS)

	2000–2002	2004–2006	2009–2011	2013–2015	2017–2019	2018–2020	2019–2021	2020–2022
World	804.9	786.7	612.6	575.0	590.5	633.7	684.4	725.1
Arab States	33.6	35.7	37.3	41.4	51.3	52.5	53.8	56.4
Low-income countries	20.3	22.4	24.6	22.3	29.7	30.2	30.4	31.1
Lower-middle-income countries	9.6	10.3	8.9	9.0	10.2	10.4	11.2	12.6
Upper-middle-income countries	6.6	6.2	5.8	7.4	8.8	9.5	10.1	10.8
High-income countries	1.7	1.9	3.5	2.7	2.5	2.4	2.2	1.9
Arab States LDCs	18.0	19.6	20.9	21.0	26.4	26.1	25.6	25.8
Conflict countries	24.9	26.2	28.0	28.8	37.2	37.7	37.9	38.7
Non-conflict countries	12.2	13.0	13.1	12.6	14.1	14.8	15.9	17.6
Algeria	2.5	2.2	1.5	1.1	n.r.	n.r.	n.r.	n.r.
Comoros	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Djibouti	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Egypt	3.8	5.0	4.5	5.3	6.6	6.6	6.9	7.8
Iraq	5.5	5.1	4.6	6.2	7.0	7.0	7.0	7.1
Kuwait	<0.1	n.r.	n.r.	n.r.	0.1	0.1	n.r.	n.r.
Libya	0.2	0.3	0.4	0.3	0.5	0.5	0.5	0.6
Mauritania	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.4
Morocco	1.8	1.7	1.7	1.4	1.3	1.5	2.0	2.3
Oman	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Saudi Arabia	1.2	1.2	2.4	1.8	1.6	1.6	1.5	1.4
Somalia	6.4	7.4	8.4	7.8	8.3	8.3	8.3	8.3
Sudan				3.5	4.8	4.9	5.2	5.4
Syrian Arab Republic	1.3	0.9	1.1	1.9	3.9	4.7	5.3	5.9
Tunisia	0.4	0.4	0.4	0.3	n.r.	n.r.	0.3	0.4
United Arab Emirates	0.1	0.3	0.6	0.4	0.3	0.3	0.3	n.r.
Yemen	5.0	5.8	6.2	9.1	12.7	12.3	11.6	11.4

Notes: The values for 2020 to 2022 are projections. n.r. = not reported, as the prevalence is less than 2.5 percent.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 18
PREVALENCE OF FOOD INSECURITY (PERCENT)

	Severe food insecurity				Moderate or severe food insecurity			
	2014–2016	2017–2019	2019–2021	2020–2022	2014–2016	2017–2019	2019–2021	2020–2022
World	7.8	8.8	10.6	11.3	21.9	24.7	28.1	29.5
Arab States	11.5	11.5	11.6	12.4	31.7	33.5	34.9	36.5
Low-income countries	15.6	16.2	18.0	18.8	44.7	48.2	53.8	57.4
Lower-middle-income countries	8.9	7.7	7.7	8.9	26.2	27.4	27.1	28.4
Upper-middle-income countries	17.3	19.3	17.4	17.5	38.1	41.2	41.7	42.3
High-income countries	6.8	7.3	6.8	6.4	20.3	19.5	18.7	17.7
Arab States LDCs	16.8	17.3	19.3	20.3	47.6	51.6	57.6	61.7
Conflict countries	16.9	18.2	18.1	18.6	44.2	47.4	50.5	53.0
Non-conflict countries	8.6	7.8	8.0	8.8	24.9	25.8	26.0	27.0
Algeria	13.0	9.3	6.2	5.6	22.9	17.6	19.0	19.4
Bahrain	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Comoros	n.a.	n.a.	27.4	27.4	n.a.	n.a.	79.7	79.7
Djibouti	n.a.	n.a.	16.5	16.5	n.a.	n.a.	49.2	49.2
Egypt	8.4	7.4	7.1	8.8	27.8	31.2	27.3	28.5
Iraq	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Jordan	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Kuwait	4.9	4.9	4.9	4.5	12.6	12.3	12.2	10.9
Lebanon	n.a.	4.2	10.2	12.6	n.a.	14.7	29.0	36.5
Libya	11.2	16.7	20.7	21.2	29.1	35.7	39.4	39.8
Mauritania	4.6	5.9	7.2	9.5	26.3	35.9	45.3	53.7
Morocco	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	n.a.	4.2	3.7	4.0	n.a.	26.8	28.4	28.1
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Somalia	n.a.	n.a.	41.7	43.4	n.a.	n.a.	77.4	79.5
Sudan	13.4	16.4	17.4	18.1	41.4	48.9	50.7	51.8
Syrian Arab Republic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	9.1	9.7	12.6	12.6	18.2	22.1	28.0	28.5
United Arab Emirates	n.a.	n.a.	0.8	1.2	n.a.	n.a.	7.5	9.8
Yemen	12.3	9.5	11.9	12.8	45.7	46.0	58.5	67.2

Note: n.a. = data not available; n.r. = not reported.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 19
NUMBER OF FOOD-INSECURE PEOPLE (MILLIONS)

	Severely food insecure				Moderately or severely food insecure			
	2014–2016	2017–2019	2019–2021	2020–2022	2014–2016	2017–2019	2019–2021	2020–2022
World	**575.7**	**677.7**	**832.6**	**892.7**	**1 626.1**	**1 899.7**	**2 205.3**	**2 335.5**
Arab States	46.8	49.7	52.2	56.6	129.0	145.2	156.9	166.7
Low-income countries	15.6	17.5	20.5	22.0	44.6	51.9	61.4	67.2
Lower-middle-income countries	17.3	15.7	16.3	19.1	50.8	56.0	57.2	60.8
Upper-middle-income countries	10.3	12.3	11.4	11.7	22.7	26.1	27.5	28.3
High-income countries	3.6	4.2	4.0	3.7	10.9	11.2	10.9	10.3
Arab States LDCs	14.5	16.3	19.2	20.7	41.0	48.7	57.4	63.1
Conflict countries	24.3	28.1	29.5	31.1	63.6	73.4	82.5	88.6
Non-conflict countries	22.5	21.6	22.8	25.5	65.4	71.8	74.5	78.1
Algeria	5.2	3.9	2.7	2.5	9.0	7.4	8.2	8.6
Bahrain	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Comoros	n.a.	n.a.	0.2	0.2	n.a.	n.a.	0.6	0.7
Djibouti	n.a.	n.a.	0.2	0.2	n.a.	n.a.	0.5	0.5
Egypt	8.2	7.7	7.6	9.7	27.1	32.4	29.3	31.1
Iraq	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Jordan	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Kuwait	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.5
Lebanon	n.a.	0.2	0.6	0.7	n.a.	0.9	1.6	2.0
Libya	0.7	1.1	1.4	1.4	1.8	2.3	2.6	2.7
Mauritania	0.2	0.3	0.3	0.4	1.0	1.5	2.0	2.5
Morocco	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	n.a.	0.2	0.2	0.2	n.a.	1.3	1.4	1.4
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Somalia	n.a.	n.a.	6.9	7.4	n.a.	n.a.	12.8	13.6
Sudan	5.1	6.9	7.7	8.2	15.8	20.5	22.5	23.7
Syrian Arab Republic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	1.1	1.2	1.5	1.6	2.1	2.6	3.4	3.5
United Arab Emirates	n.a.	n.a.	<0.1	0.1	n.a.	n.a.	0.7	0.9
Yemen	3.5	2.9	3.9	4.2	13.0	14.2	18.9	22.2

Note: n.a. = data not available; n.r. = not reported.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 20

PREVALENCE OF FOOD INSECURITY BY SEX (PERCENT)

	Severe food insecurity				Moderate or severe food insecurity			
	Men		Women		Men		Women	
	2014–2016	2020–2022	2014–2016	2020–2022	2014–2016	2020–2022	2014–2016	2020–2022
World	6.5	9.3	7.2	10.8	18.9	25.2	20.7	28.1
Arab States	9.9	11.0	12.2	12.9	28.2	33.3	33.2	37.2
Low-income countries	14.5	17.3	15.8	18.9	42.8	54.5	45.2	58.3
Lower-middle-income countries	7.9	8.7	10.0	9.2	23.3	27.9	28.9	28.7
Upper-middle-income countries	14.6	14.6	19.0	20.4	34.0	37.8	40.5	46.7
High-income countries	6.8	6.5	6.4	5.9	20.6	18.2	19.3	16.5
Arab States LDCs	15.8	19.1	17.1	20.5	46.2	60.0	48.3	62.8
Conflict countries	15.3	16.3	17.9	20.0	41.7	48.8	45.6	55.4
Non-conflict countries	7.7	8.5	9.4	9.0	22.5	26.1	27.1	27.4
Algeria	11.9	6.9	14.1	4.3	21.6	21.7	24.2	17.0
Bahrain	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Comoros	n.a.	26.4	n.a.	28.4	n.a.	79.5	n.a.	80.0
Djibouti	n.a.	17.6	n.a.	15.4	n.a.	49.3	n.a.	49.2
Egypt	7.0	7.9	9.9	9.8	23.2	27.0	32.3	29.9
Iraq	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Jordan	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Kuwait	6.4	5.5	3.3	3.6	15.7	12.3	9.5	9.4
Lebanon	n.a.	11.9	n.a.	13.3	n.a.	35.7	n.a.	37.3
Libya	9.0	17.5	13.4	24.9	24.1	34.8	34.1	44.8
Mauritania	4.4	9.4	4.9	9.6	25.1	54.5	27.5	52.9
Morocco	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	n.a.	3.4	n.a.	4.6	n.a.	26.0	n.a.	30.2
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Somalia	n.a.	43.4	n.a.	43.4	n.a.	79.5	n.a.	79.5
Sudan	13.4	18.1	13.4	18.1	41.4	51.9	41.4	51.9
Syrian Arab Republic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	8.8	13.4	9.5	11.9	18.3	28.8	18.0	28.1
United Arab Emirates	n.a.	1.4	n.a.	1.1	n.a.	11.4	n.a.	8.2
Yemen	10.4	10.8	14.2	14.8	42.6	62.7	48.7	71.7

Note: n.a. = data not available; n.r. = not reported.

Source: Based on FAO. 2023. *Suite of Food Security Indicators. In: FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

TABLE 21
PREVALENCE OF STUNTING AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2000	2005	2010	2012	2015	2019	2020	2022
World	**33**	**31.1**	**27.9**	**26.3**	**24.6**	**23**	**22.7**	**22.3**
Arab States	28.0	27.1	25.1	23.7	22.1	20.8	20.5	19.9
Low-income countries	39.9	39.8	36.7	35.1	33.7	32.1	31.6	30.5
Lower-middle-income countries	24.4	21.9	20.7	19.7	18.1	16.9	16.6	16.0
Upper-middle-income countries	24.5	24.2	20.9	19.0	16.5	14.4	13.8	12.8
High-income countries	10.8	10.3	10.3	10.2	10.4	10.8	10.9	10.8
Arab States LDCs	43.5	42.7	39.3	37.4	35.2	32.9	32.3	31.2
Conflict countries	36.8	36.6	33.5	31.6	29.8	28.0	27.5	26.5
Non-conflict countries	21.5	19.5	18.5	17.6	16.3	15.4	15.2	14.7
Algeria	22.3	18.1	13.6	12.1	10.7	9.4	9.1	8.6
Bahrain	10.9	9.0	7.3	6.8	6.2	5.4	5.3	5.0
Comoros	43.9	41.8	35.5	31.9	27.2	21.7	20.6	18.8
Djibouti	33.7	35.8	32.2	29.6	26.1	21.5	20.5	18.7
Egypt	25.9	24.4	25.4	24.6	22.5	21.4	21.1	20.4
Iraq	27.9	27.1	22.5	19.6	16.0	12.2	11.3	9.9
Jordan	10.8	9.8	8.3	7.7	7.4	7.2	7.1	6.6
Kuwait	4.0	4.1	4.5	4.8	5.4	6.3	6.5	6.9
Lebanon	17.8	16.4	14.5	11.7	9.4	8.2	7.9	7.4
Libya	18.4	21.2	26.3	30.0	37.7	47.9	49.6	52.2
Mauritania	39.3	32.1	27.3	26.0	25.1	23.8	23.3	22.1
Morocco	25.2	20.3	16.8	15.8	14.8	13.8	13.4	12.8
Oman	14.6	12.0	11.2	11.1	11.7	12.5	12.6	12.7
Palestine	9.9	11.4	11.1	10.3	8.8	7.7	7.6	7.5
Qatar	9.6	8.1	6.6	6.2	5.8	5.0	4.8	4.4
Saudi Arabia	11.4	11.3	11.7	11.8	12.2	12.6	12.6	12.4
Somalia	33.0	33.9	30.1	27.6	24.2	20.3	19.4	18.0
Sudan	39.3	37.8	36.5	36.0	36.2	36.5	36.4	36.0
Syrian Arab Republic	28.3	29.7	27.2	26.4	27.6	27.3	26.7	25.4
Tunisia	12.6	10.9	9.3	8.8	8.6	8.8	8.8	8.6
Yemen	55.4	56.1	50.4	46.9	42.3	37.6	36.7	35.1

Source: Based on UNICEF, WHO & World Bank. 2023. Levels and Trends in Child Malnutrition. UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. 2023 edition. https://data.unicef.org/topic/nutrition

TABLE 22
PREVALENCE OF WASTING AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2000	2005	2010	2015	2019	2020	2022
World	**8.7**	**8.3**	**7.7**	**7.2**	**6.9**	**6.8**	**6.8**
Arab States							n.a.
Low-income countries							n.a.
Lower-middle-income countries							3.0
Upper-middle-income countries							2.4
High-income countries							4.7
Arab States LDCs							n.a.
Conflict countries							n.a.
Non-conflict countries							3.2
Algeria	3.1				2.7		
Comoros	13.3						
Djibouti					10.6		
Egypt		5.3					
Iraq	6.6						
Jordan					0.6		
Kuwait		3.3	2.4	3.0	2.0	2.3	
Mauritania	15.3			14.8	11.1	6.4	13.6
Morocco					2.3		
Palestine	2.0		3.3			1.3	
Saudi Arabia				5.5	4.9	4.4	
Sudan			15.4				
Syrian Arab Republic	4.9		11.5				
Tunisia	2.9						
Yemen		13.8					

Source: Based on UNICEF, WHO & World Bank. 2023. Levels and Trends in Child Malnutrition. UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. 2023 edition. https://data.unicef.org/topic/nutrition

TABLE 23
PREVALENCE OF OVERWEIGHT AMONG CHILDREN UNDER 5 YEARS OF AGE (PERCENT)

	2000	2005	2010	2012	2015	2019	2020	2022
World	5.3	5.6	5.5	5.5	5.5	5.6	5.6	5.6
Arab States	8.8	10.5	10.4	10.0	9.6	9.4	9.4	9.5
Low-income countries	6.8	7.2	6.1	5.4	4.2	3.5	3.4	3.6
Lower-middle-income countries	11.5	13.9	13.8	13.4	13.3	13.7	13.9	14.4
Upper-middle-income countries	8.2	11.1	11.4	10.7	9.7	9.0	8.9	8.7
High-income countries	3.9	5.6	7.7	8.5	9.5	9.9	9.9	9.5
Arab States LDCs	4.2	4.0	2.8	2.5	2.3	2.3	2.3	2.4
Conflict countries	7.3	8.5	7.7	7.0	5.9	5.0	4.9	4.8
Non-conflict countries	10.0	12.2	12.5	12.3	12.3	12.8	12.9	13.4
Algeria	12.8	15.4	14.6	13.5	12.2	11.7	11.7	11.9
Comoros	13.5	16.4	12.8	11.5	10.1	8.7	8.3	7.7
Djibouti	1.2	1.3	1.2	1.3	1.5	2.2	2.5	3.2
Egypt	12.1	14.8	15.7	15.7	16.2	17.3	17.8	18.8
Iraq	7.8	10.4	10.3	9.5	8.4	7.2	6.9	6.4
Jordan	4.5	5.3	5.9	5.9	6.3	7.6	8.1	9.5
Kuwait	7.7	8.0	8.6	9.0	9.6	10.6	10.9	11.7
Lebanon	8.4	9.6	8.6	8.5	8.3	8.1	8.1	8.3
Libya	16.2	22.9	26.5	26.4	26.6	27.6	27.9	28.7
Mauritania	3.5	3.7	2.0	1.9	1.9	1.9	1.9	2.0
Morocco	13.3	14.5	11.3	9.5	7.5	5.7	5.4	4.9
Oman	1.7	1.8	2.5	2.9	3.7	5.1	5.6	6.5
Palestine	6.1	7.8	7.9	7.6	7.6	8.0	8.1	8.3
Qatar	10.0	11.2	12.1	12.2	12.1	12.0	11.9	11.7
Saudi Arabia	3.6	5.6	8.2	9.3	10.5	10.9	10.7	10.1
Somalia	4.5	4.5	3.3	3.0	2.7	2.7	2.7	2.7
Sudan	3.6	3.5	2.6	2.4	2.3	2.5	2.5	2.7
Syrian Arab Republic	17.0	19.7	18.3	16.6	13.8	11.9	11.7	11.7
Tunisia	4.0	7.4	11.4	12.7	14.8	17.6	18.2	19.0
Yemen	4.7	4.2	2.9	2.4	1.9	1.7	1.6	1.7

Source: Based on UNICEF, WHO & World Bank. 2023. Levels and Trends in Child Malnutrition. UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. 2023 edition. https://data.unicef.org/topic/nutrition

TABLE 24
PREVALENCE OF ANAEMIA AMONG WOMEN AGED 15 TO 49 YEARS (PERCENT)

	2000	2005	2010	2012	2015	2017	2018	2019
World	31.2	29.9	28.6	28.5	28.8	29.3	29.6	29.9
Arab States	38.1	36.2	33.8	33.2	32.8	32.9	33.0	33.2
Low-income countries	47.3	45.4	43.2	43.0	43.3	43.6	43.8	43.9
Lower-middle-income countries	35.7	34.1	31.9	31.2	30.6	30.3	30.2	30.2
Upper-middle-income countries	37.0	33.9	30.5	29.7	29.5	29.9	30.1	30.4
High-income countries	31.2	28.6	26.1	25.7	25.9	26.4	26.7	27.1
Arab States LDCs	50.5	48.7	46.6	46.1	45.8	45.8	45.8	45.9
Conflict countries	44.5	42.2	39.6	39.0	38.7	38.9	39.0	39.2
Non-conflict countries	34.9	33.2	30.8	30.2	29.8	29.8	29.8	29.9
Algeria	37.6	35.2	33.3	32.9	32.8	33.0	33.1	33.3
Bahrain	43.3	40.1	36.9	36.3	35.7	35.6	35.5	35.4
Comoros	38.4	35.8	33.2	32.8	33.0	33.3	33.5	33.8
Djibouti	37.2	33.3	31.0	31.0	31.3	31.8	32.0	32.3
Egypt	35.5	34.5	31.9	31.0	29.7	28.8	28.5	28.3
Iraq	39.5	35.9	31.2	29.8	28.6	28.4	28.4	28.6
Jordan	30.4	29.0	29.3	30.5	33.2	35.6	36.6	37.7
Kuwait	24.1	21.2	20.4	21.1	22.4	23.1	23.4	23.7
Lebanon	26.6	25.6	25.0	25.4	26.7	27.5	27.9	28.3
Libya	32.6	30.7	28.8	28.6	28.9	29.4	29.6	29.9
Mauritania	48.7	47.7	45.9	45.1	44.2	43.7	43.5	43.3
Morocco	35.3	33.2	30.5	29.8	29.5	29.6	29.7	29.9
Oman	37.8	33.8	29.7	29.0	28.8	29.1	29.1	29.1
Palestine	36.7	34.5	31.3	30.5	30.2	30.5	30.7	31.0
Qatar	31.4	29.2	27.4	27.1	27.2	27.6	27.9	28.1
Saudi Arabia	31.7	29.2	26.4	25.8	26.0	26.8	27.1	27.5
Somalia	47.9	46.6	44.6	44.0	43.5	43.3	43.2	43.1
Sudan	42.9	40.2	37.4	36.8	36.3	36.4	36.4	36.5
Syrian Arab Republic	36.8	34.4	32.1	31.7	31.9	32.2	32.5	32.8
Tunisia	31.5	30.9	30.3	30.4	30.8	31.4	31.7	32.1
United Arab Emirates	24.3	23.4	23.8	24.0	23.7	23.7	24.0	24.3
Yemen	66.1	64.3	62.1	61.5	61.3	61.4	61.5	61.5

Source: Based on WHO. 2021. Global anaemia estimates, Edition 2021. In: *WHO | Global Health Observatory (GHO) data repository*. Geneva, Switzerland. [Cited 20 April 2023]. www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children

Note: The estimates refer to women aged 15 to 49 years, including pregnant, non-pregnant women and lactating women and were adjusted for altitude and smoking. WHO defines anaemia in pregnant women as a haemoglobin concentration <110 g/L at sea level, and anaemia in non-pregnant women and lactating women as a haemoglobin concentration <120 g/L.

TABLE 25
PREVALENCE OF OBESITY AMONG ADULTS (PERCENT)

	2000	2005	2010	2012	2014	2015	2016
World	8.7	9.9	11.2	11.8	12.5	12.8	13.1
Arab States	17.6	20.1	23.1	24.5	26.1	26.8	27.6
Low-income countries	11.4	13.2	15.6	16.6	17.4	17.7	18.1
Lower-middle-income countries	17.7	20.4	23.6	25.1	26.7	27.4	28.3
Upper-middle-income countries	19.8	22.1	25.1	26.3	27.7	28.4	29.1
High-income countries	22.7	25.5	27.8	29.3	31.1	32.0	33.0
Arab States LDCs	6.1	7.4	9.1	10.0	10.8	11.3	11.8
Conflict countries	13.9	15.9	18.3	19.4	20.4	20.9	21.5
Non-conflict countries	18.8	21.5	24.8	26.2	27.9	28.7	29.6
Algeria	17.4	20.2	23.3	24.7	26.0	26.7	27.4
Bahrain	22.9	24.7	26.6	27.6	28.8	29.3	29.8
Comoros	4.1	5.1	6.2	6.7	7.2	7.5	7.8
Djibouti	9.3	10.5	11.8	12.3	12.9	13.2	13.5
Egypt	22.2	24.9	28.0	29.3	30.6	31.3	32.0
Iraq	22.2	24.4	26.9	28.0	29.2	29.8	30.4
Jordan	26.4	29.2	31.9	33.1	34.3	34.9	35.5
Kuwait	29.6	32.0	34.6	35.6	36.8	37.4	37.9
Lebanon	24.6	26.3	28.7	29.7	30.8	31.4	32.0
Libya	23.5	26.0	28.8	30.0	31.3	31.9	32.5
Mauritania	6.7	8.4	10.3	11.0	11.8	12.3	12.7
Morocco	16.7	19.2	22.1	23.4	24.7	25.4	26.1
Oman	18.0	20.0	23.1	24.3	25.6	26.3	27.0
Qatar	26.2	28.7	31.1	32.4	33.8	34.5	35.1
Saudi Arabia	26.2	28.4	31.5	32.8	34.1	34.7	35.4
Somalia	4.1	5.2	6.4	7.0	7.6	7.9	8.3
Syrian Arab Republic	18.2	20.7	23.8	25.1	26.4	27.1	27.8
Tunisia	18.2	20.7	23.4	24.6	25.7	26.3	26.9
United Arab Emirates	21.8	24.5	27.7	29.0	30.3	31.0	31.7
Yemen	8.8	11.0	13.5	14.6	15.9	16.5	17.1

Source: Based on WHO. 2020. Global Health Observatory (GHO) data repository. In: *WHO*. [Cited 28 April 2020]. https://apps.who.int/gho/data/node.main.A900A?lang=en

TABLE 26

PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS 0–5 MONTHS OF AGE (PERCENT)

	2000	2005	2012	2015	2019	2020	2021
World			37.0				47.7
Arab States			34.6				n.a.
Low-income countries			33.2				n.a.
Lower-middle-income countries			39.7				n.a.
Upper-middle-income countries			19.9				24.4
High-income countries			n.a.				n.a.
Arab States LDCs			29.4				n.a.
Conflict countries			28.7				n.a.
Non-conflict countries			38.9				n.a.
Algeria	12.6		25.4		28.6		
Comoros	10.2		11.4				
Djibouti			12.4				
Egypt	56.1	41.1					
Iraq	11.6						
Jordan			22.7		17.8		
Mauritania	20.2			41.1		40.9	
Palestine						38.9	
Qatar			29.3				
Syrian Arab Republic					28.5		
Tunisia			8.5				

Source: Based on UNICEF. 2022. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2023]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/

TABLE 27
PREVALENCE OF LOW BIRTHWEIGHT (PERCENT)

	2000	2005	2010	2012	2015	2019	2020
World	16.6	16.1	15.3	15.0	14.8	14.6	14.7
Arab States	13.1	13.1	13.1	13.1	13.2	13.2	13.3
Low-income countries	13.5	13.5	13.5	13.5	13.6	13.7	13.7
Lower-middle-income countries	14.1	14.0	13.8	13.9	13.9	13.8	13.8
Upper-middle-income countries	10.9	11.2	11.6	11.6	11.9	12.1	12.2
High-income countries	9.8	10.0	10.3	10.4	10.6	10.6	10.7
Arab States LDCs	13.8	13.7	13.7	13.6	13.6	13.6	13.7
Conflict countries	12.6	12.7	12.8	12.8	12.8	12.9	13.0
Non-conflict countries	13.4	13.4	13.4	13.4	13.6	13.5	13.5
Algeria	6.8	6.8	6.9	6.9	7.0	7.2	7.2
Bahrain	10.1	10.7	11.4	11.6	11.9	12.3	12.4
Comoros	25.5	25.0	24.4	24.1	23.8	23.2	23.0
Iraq	10.3	10.5	10.7	10.8	10.8	10.9	10.9
Jordan	14.6	15.6	16.5	17.0	17.6	18.7	18.9
Kuwait	10.1	11.0	12.0	12.4	13.2	14.1	14.4
Lebanon	12.3	12.4	12.1	12.2	12.4	12.6	12.6
Morocco	18.3	17.5	16.5	16.1	15.6	14.9	14.8
Oman	13.5	13.4	13.3	13.3	13.3	13.2	13.2
Palestine	9.0	9.4	9.7	9.8	10.0	10.3	10.4
Qatar	9.9	9.9	9.9	9.9	9.9	10.0	10.0
Tunisia	7.8	7.9	8.0	8.1	8.2	8.2	8.2
United Arab Emirates	12.9	13.0	13.7	13.9	13.9	13.9	13.9

Source: Based on UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 12 July 2023]. www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates

TABLE 28

AFFORDABILITY OF A HEALTHY DIET

	Number of people unable to afford a healthy diet (million)					Percentage of people unable to afford a healthy diet (percent)				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
World	3 124.9	3 019.1	3 005.5	3 191.9	3 139.5	43.8	41.8	41.2	43.3	42.2
Arab States	137.5	143.3	142.6	145.4	141.6	45.9	46.9	45.8	45.8	43.8
Low-income countries	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Lower-middle-income countries	94.2	97.8	95.0	94.5	93.8	47.1	48.1	45.9	45.0	44.0
Upper-middle-income countries	7.3	7.4	7.1	9.0	8.8	14.6	14.5	13.7	16.8	16.1
High-income countries	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Arab States LDCs	39.2	41.5	43.8	45.3	42.6	85.5	87.7	89.9	90.5	82.9
Conflict countries	42.6	45.0	46.9	50.0	47.0	53.1	54.5	55.3	57.5	52.7
Non-conflict countries	94.8	98.4	95.7	95.4	94.6	43.3	44.1	42.2	41.4	40.4
Algeria	13.4	13.1	12.5	13.5	14.3	32.5	31.2	29.2	31.1	32.4
Bahrain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Djibouti	0.7	0.7	0.7	0.7	0.7	65.8	66.4	65.2	66.7	65.3
Egypt	68.6	72.7	70.9	67.9	67.3	67.4	70.1	67.2	63.2	61.6
Iraq	6.7	6.8	6.4	8.2	8.0	16.8	16.8	15.5	19.2	18.4
Jordan	0.6	0.6	0.7	0.8	0.8	6.1	5.7	6.5	7.4	7.1
Kuwait	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mauritania	2.6	2.6	2.6	2.7	2.9	61.7	61.1	59.7	60.9	62.4
Morocco	6.3	6.0	5.7	6.5	5.7	17.7	16.8	15.7	17.7	15.5
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	0.8	0.8	0.8	1.0	0.8	18.0	18.4	18.0	20.0	15.4
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sudan	36.0	38.2	40.5	41.8	39.0	88.4	90.9	93.6	94.1	85.4
Tunisia	1.8	1.8	1.7	2.2	2.1	15.5	14.9	14.4	18.0	17.1
United Arab Emirates	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1

Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

TABLE 29
COST OF A HEALTHY DIET (PPP DOLLARS PER PERSON PER DAY)

	2017	2018	2019	2020	2021
World	3 295	3 355	3 431	3 511	3 662
Arab States	3 223	3 309	3 400	3 468	3 553
Low-income countries	n.r.	n.r.	n.r.	n.r.	n.r.
Lower-middle-income countries	3 285	3 354	3 403	3 389	3 539
Upper-middle-income countries	3 395	3 459	3 517	3 577	3 701
High-income countries	3 018	3 105	3 206	3 383	3 599
Arab States LDCs	3 307	3 454	3 649	3 704	3 427
Conflict countries	3 526	3 693	3 920	3 924	3 373
Non-conflict countries	3 180	3 255	3 325	3 403	3 578
Algeria	3 763	3 822	3 796	3 760	4 043
Bahrain	3 379	3 463	3 573	3 835	4 036
Djibouti	2 797	2 866	2 985	3 112	3 250
Egypt	3 457	3 507	3 503	3 369	3 506
Iraq	3 378	3 464	3 534	3 540	3 665
Jordan	3 412	3 454	3 500	3 614	3 737
Kuwait	3 344	3 407	3 468	3 606	3 997
Mauritania	3 451	3 574	3 654	3 692	3 948
Morocco	2 710	2 752	2 759	2 797	2 905
Oman	2 815	2 838	2 921	3 021	3 141
Palestine	3 342	3 398	3 493	3 356	3 285
Qatar	2 375	2 426	2 484	2 577	2 708
Saudi Arabia	3 441	3 663	3 888	4 148	4 441
Sudan	3 674	3 921	4 306	4 308	3 081
Tunisia	3 476	3 559	3 628	3 639	3 833
United Arab Emirates	2 755	2 835	2 902	3 111	3 269

Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

ANNEX II
INDICATORS DEFINITIONS

Undernourishment

Undernourishment is defined as the condition of an individual whose habitual food consumption is insufficient to provide, on average, the amount of dietary energy required to maintain a normal, active and healthy life. The indicator is reported as a prevalence and is denominated as "prevalence of undernourishment", which is an estimate of the percentage of individuals in the total population who are in a condition of undernourishment.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

Food insecurity as measured by the Food Insecurity Experience Scale

Food insecurity as measured by the FIES indicator refers to limited access to food, at the level of individuals or households, due to lack of money or other resources. The severity of food insecurity is measured using data collected with the FIES survey module (FIES-SM), a set of eight questions asking respondents to self-report conditions and experiences typically associated with limited access to food. For purposes of annual SDG monitoring, the questions are asked with reference to the 12 months preceding the survey.

FAO provides estimates of food insecurity at two different levels of severity: moderate or severe food insecurity and severe food insecurity. People affected by moderate food insecurity face uncertainties about their ability to obtain food and have been forced to reduce, at times during the year, the quality and/or quantity of food they consume due to lack of money or other resources. Severe food insecurity refers to situations when individuals have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating. The prevalence of moderate or severe food insecurity is the combined prevalence of food insecurity at both severity levels.

Source: Based on FAO. 2023. Suite of Food Security Indicators. In: *FAOSTAT*. Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/FS

Stunting, wasting and overweight in children under 5 years of age

Stunting children under five years of age is when:height/length (cm) for age (months) < -2 standard deviation (SD) of the WHO Child Growth Standards median. Low height-for-age is an indicator that reflects the cumulative effects of undernutrition and infections since and even before birth. It may be the result of long-term nutritional deprivation, recurrent infections and lack of water and sanitation infrastructures. Stunted children are at greater risk for illness and death. Stunting often adversely affects the cognitive and physical growth of children, making for poor performance in school and reduced intellectual capacity.

Prevalence cut-off values for public health significance are as follows: very low <2.5 percent; low 2.5—<10 percent; medium 10—<20 percent; high 20—<30 percent; and very high >=30 percent.

Wasting is defined as weight (kg) for height/length (cm) < -2 SD of the WHO Child Growth Standards median. Low weight-for-height is an indicator of acute weight loss or a failure to gain weight and can be the result of insufficient food intake and/or an incidence of infectious diseases, especially diarrhoea. Wasting indicates acute malnutrition and increases the risk of death in childhood from infectious diseases such as diarrhoea, pneumonia and measles.

Prevalence cut-off values for public health significance for wasting are as follows: very low <2.5 percent; low 2.5–<5 percent; medium 5–<10 percent; high 10–<15 percent; very high >=15 percent.

Overweight is defined as weight (kg) for height/ length (cm) > +2 SD of the WHO Child Growth Standards median. This indicator reflects excessive weight gain for height generally due to energy intakes exceeding children's energy requirements. Childhood overweight and obesity is associated with a higher probability of overweight and obesity in adulthood, which can lead to various NCDs, such as diabetes and cardiovascular diseases.

Prevalence cut-off values for public health significance for child overweight are as follows: very low <2.5 percent; low 2.5–<5 percent; medium 5–<10 percent; high 10–<15 percent; very high >=15 percent.

Source: Based on UNICEF, WHO & World Bank. 2023. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2023 edition)*. [Cited 24 April 2023]. https://data.unicef.org/resources/jme-report-2023

Exclusive breastfeeding

Exclusive breastfeeding for infants under 6 months of age is defined as receiving only breastmilk and no additional food or drink, not even water. Exclusive breastfeeding is a cornerstone of child survival and is the best food for newborns, as breastmilk shapes the baby's microbiome, strengthens the immune system and reduces the risk of developing chronic diseases. Breastfeeding also benefits mothers by preventing postpartum haemorrhage and promoting uterine involution, decreasing risk of iron-deficiency anaemia, reducing the risk of various types of cancer and providing psychological benefits.

Source: Based on UNICEF. 2022. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2023]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/

Low birthweight

Low birthweight is defined as a weight at birth of less than 2 500 g (less than 5.51 lbs), regardless of gestational age. A newborn's weight at birth is an important marker of maternal and foetal health and nutrition.

Source: Based on UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition.* [Cited 12 July 2023]. www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates

Adult obesity

The body mass index (BMI) is the ratio of weight-to-height commonly used to classify the nutritional status of adults. It is calculated as the body weight in kilograms divided by the height of the body in metres squared (kg/m^2). Obesity includes individuals with BMI equal to or higher than 30 kg/m^2.

Source: Based on WHO. 2020. Global Health Observatory (GHO) data repository. In: *WHO*. [Cited 28 April 2020]. https://apps.who.int/gho/data/node.main.A900A?lang=en

Anaemia in women aged 15 to 49 years

Anaemia in women aged 15 to 49 years is defined as the percentage of women aged 15–49 years with a haemoglobin concentration less than 120 g/L for non-pregnant women and lactating women, and less than 110 g/L for pregnant women, adjusted for altitude and smoking.

Prevalence cut-off values for public health significance are as follows: no public health problem <5 percent; mild 5–19.9 percent; moderate 20–39.9 percent; severe ≥40 percent.

Source: Based on WHO. 2021. Vitamin and Mineral Nutrition Information System (VMNIS). In: *WHO.* [Cited 25 May 2021]. www.who.int/teams/nutrition-food-safety/databases/vitamin-and-mineral-nutrition-information-system. WHO. 2021. Global anaemia estimates, Edition 2021. In: *WHO | Global Health Observatory (GHO) data repository.* [Cited 20 April 2023]. www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children

Cost and affordability of a healthy diet

The cost of a healthy diet indicator is the cost of purchasing the least expensive locally available foods to meet requirements for energy and food-based dietary guidelines (FBDGs), for a representative person within energy balance at 2 330 kcal/day. The cost of a healthy diet is converted to international dollars using purchasing power parity (PPP).

The affordability of a healthy diet indicators measure the percentage and the number of the total population unable to afford a healthy diet. A healthy diet is considered unaffordable in a country when its cost exceeds 52 percent of household income. This percentage accounts for a portion of income that can be credibly reserved for food, based on observations that the population in low-income countries spend, on average, 52 percent of their income on food, as derived from the 2017 national accounts household expenditure data of the World Bank's International Comparison Programme (ICP). Income data are provided by the World Bank's Poverty and Inequality Platform.

Source: Based on FAO. 2023. Cost and Affordability of a Healthy Diet (CoAHD). In: *FAOSTAT.* Rome. [Cited July 2023]. www.fao.org/faostat/en/#data/CAHD

ANNEX III
NOTES

For specific country notes, please refer to Tables A.1.1 and A.1.2 in FAO, IFAD, UNICEF, WFP & WHO. 2023. *The State of Food Security and Nutrition in the World 2023. Urbanization, agrifood system transformation and healthy diets across the rural-urban continuum.* Rome, FAO. https://doi.org/10.4060/cc3017en

Prevalence of undernourishment

Regional estimates were included when more than 50 percent of the population was covered. National estimates are reported as three-year moving averages to control the low reliability of some of the underlying parameters such as the year-to-year variation in food commodity stocks, one of the components of the annual FAO Food Balance Sheets, for which complete and reliable information is scarce. Regional and global aggregates are reported as annual estimates on account of the fact that possible estimation errors are expected not to be correlated across countries.

Food insecurity

Regional estimates were included when more than 50 percent of the population was covered. To reduce the margin of error, national estimates are presented as three-year averages.

FAO estimates refer to the number of people living in households where at least one adult has been found to be food insecure.

Country-level results are presented only for those countries for which estimates are based on official national data or as provisional estimates, based on FAO data collected through the Gallup© World Poll, for countries whose national relevant authorities expressed no objection to their publication. Note that consent to publication does not necessarily imply validation of the estimate by the national authorities involved and that the estimate is subject to revision as soon as suitable data from official national sources are available. Global, regional and subregional aggregates are based on data collected in approximately 150 countries.

Child stunting, wasting and overweight

For child wasting regional estimates, values correspond to the model predicted estimates for the year 2022 only. Wasting is an acute condition that can change often and rapidly over the course of a calendar year. This makes it difficult to generate reliable trends over time with the input data available — as such, this report provides only the most recent global and regional estimates.

Some aggregates for wasting are calculated by FAO.

Exclusive breastfeeding

Regional estimates are included when more than 50 percent of the population is covered.

ANNEX IV
COUNTRY GROUPINGS

FAO uses the World Bank income groups, available at https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

The groupings are:

- high-income economies: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates;

- lower-middle-income economies: Algeria, the Comoros, Djibouti, Egypt, Lebanon, Mauritania, Morocco, Palestine, Tunisia;

- low-income economies: Somalia, the Sudan, the Syrian Arab Republic, Yemen; and

- upper-middle-income economies: Iraq, Jordan, Libya.

In addition, the following groupings are used for information purposes:

- Arab States LDCs: the Comoros, Djibouti, Mauritania, Somalia, the Sudan, Yemen;

- conflict countries: Iraq, Libya, Somalia, the Sudan, the Syrian Arab Republic, Yemen; and

- non-conflict countries: Algeria, Bahrain, the Comoros, Djibouti, Egypt, Jordan, Kuwait, Lebanon, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Tunisia, the United Arab Emirates.

The categorization of countries as being affected or not affected by conflict used in this report is determined by the FAO Regional Office for Near East and North Africa and is not necessarily aligned with the classification used in *The State of Food Security and Nutrition in the World* report.

SYRIAN ARAB REPUBLIC
Karsaneh Harvesting for crop
and livestock production.
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2023
NEAR EAST AND NORTH AFRICA
REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION

STATISTICS AND TRENDS

The Overview presents the food security and nutrition situation in the Arab States for 2022 when the effects of the war in Ukraine and record-high food and fertilizer prices hit the region that was just recovering from the economic and social shock caused by the COVID-19 pandemic.

Consequently, hunger in the Arab States has reached its highest level since 2000. The Arab region continued to suffer from the triple burden of malnutrition: besides undernutrition, child overweight/adult obesity and micronutrient deficiencies, such as anaemia. The prevalences of overweight among children and of anaemia among women are higher than the world average. The downward trend of child stunting has slowed down, and recent high food prices might even reverse it. Furthermore, the cost of a healthy diet in the region has been increasing in recent years, and healthy diets are out of reach for almost every other person in the Arab States.

The region's deteriorating food security and nutrition situation calls for the urgent need to transform agrifood systems, making them more resilient to shocks and emerging crises, more efficient, inclusive and sustainable to reach Sustainable Development Goal 2 targets.

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