# 03

# Food security and inequality:

## risk and trend analysis

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# Key messages

01

The prevalence of moderate to severe food insecurity affected a total of 180.8 million people in the Western Asia and North Africa region in 2021.[a]

02

About 35 per cent of the Arab region's population is food insecure and deprived of regular access to sufficient food and nutrition.

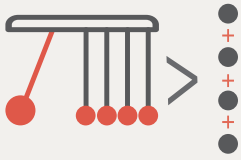
03

The number of people suffering from severe food insecurity in 2021 was estimated at 53.9 million, an increase of 5 million from the previous year.

04

Inequality in food security is not new to the Arab region; it existed prior to the war in Ukraine.

05



The Arab region is experiencing a polycrisis, whereby the compound impact of multiple and overlapping crises is greater than the sum of each crisis individually.

06


There are stark interregional inequalities in food insecurity; food insecurity in LDCs is five times higher than in the GCC.

a In addition to the countries of the Arab region, the Western Asia and North Africa region includes Armenia, Azerbaijan, Cyprus, Georgia, Israel, Türkiye and Western Sahara; it excludes the Comoros, Djibouti, Mauritania and Somalia.

# 03 Food security and inequality: risk and trend analysis

## A. Introduction

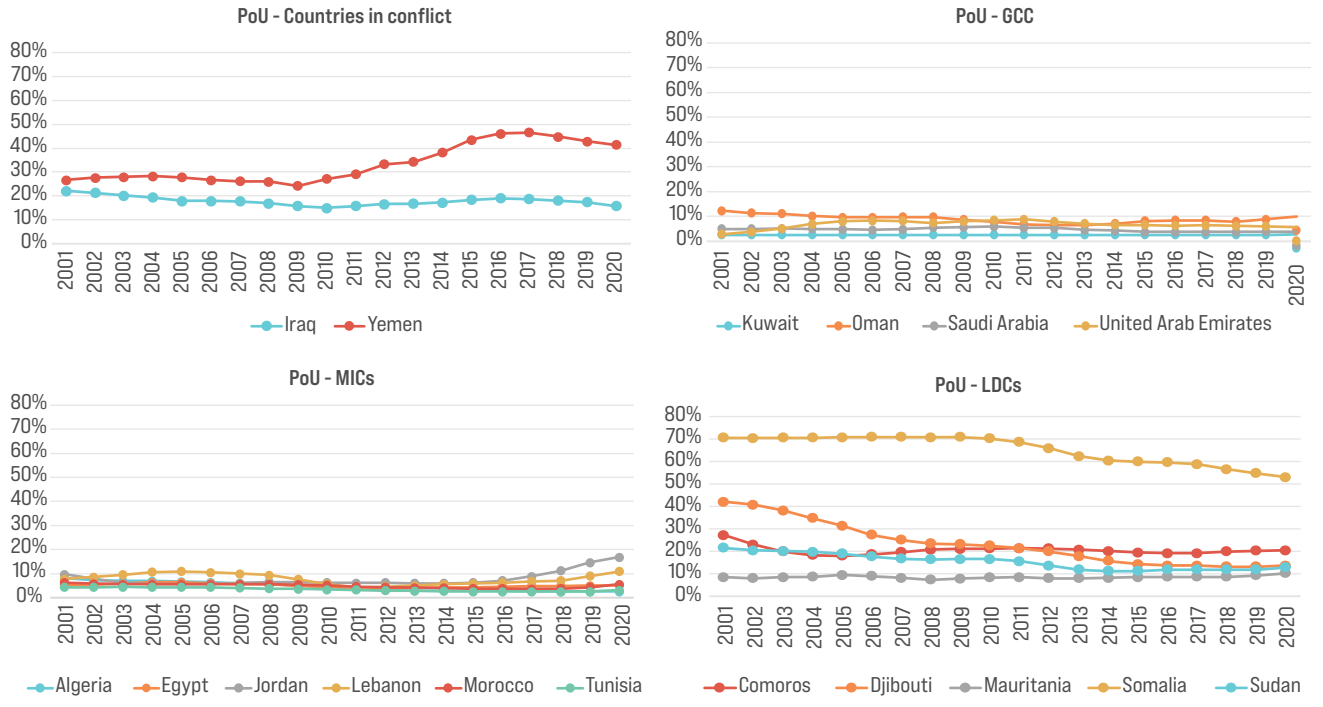
Climate change, excessive water consumption, land degradation and population growth are putting pressure on natural resources in the Arab region, leading to limited agricultural yields and putting livelihoods and food security at risk.

In recent years, Arab countries have followed different food security trends. From 2020 onwards, multiple crises experienced by the region have jeopardized some of the advances previously made in food security, potentially increasing inequalities. This chapter analyses food security trends between 2000 and 2020, followed by an assessment of different economic, political and environmental shocks experienced by Arab countries in the 2020–2022 period, for which data on food security are limited. It presents preliminary data on the unequal outcomes of the shocks among different population groups and assesses how these impact food security outcomes. Case studies using health and demographic surveys, as well as household expenditures and consumption surveys are employed to analyse inequalities in food consumption patterns.

## B. Food security trends in the Arab region 2000–2020

Arab countries have followed different trajectories of food security over the past two decades, with some countries getting closer to meeting the goal of ending hunger for all, while others have seen stagnation or deterioration.

**Figure 26.** The prevalence of undernourishment trends by group of countries, 2001–2020



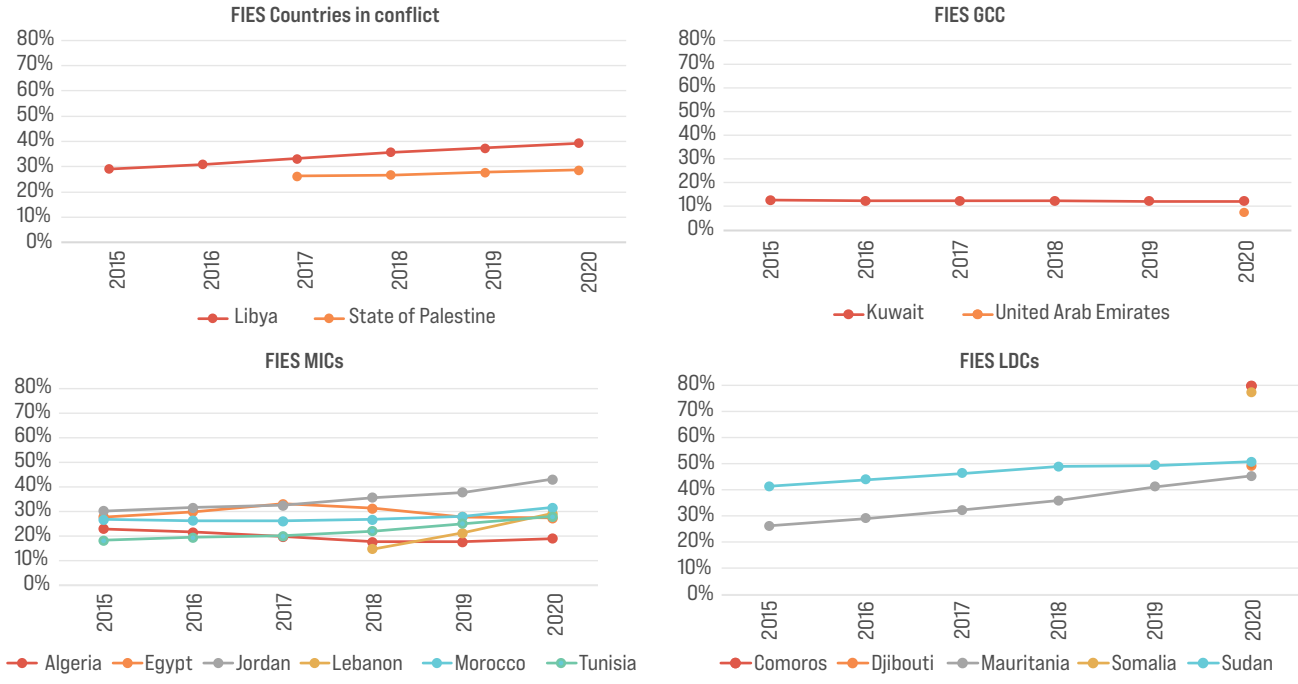

**Source:** FAOSTAT.

Hunger, one of the cruellest forms of inequality, continues to be a challenge in the region. It is most often measured by the PoU, defined as the percentage of the population whose habitual food consumption does not cover their energy and nutritional requirements.[109] As shown in figure 26, in most LDCs, PoU was high in the early 2000s and moderate improvements have been seen during the past 20 years. The progress of Djibouti is remarkable, where the PoU declined from over 40 per cent in 2000 to 13.5 per cent in 2020. Countries in conflict often lack reliable data to assess the food security situation, but humanitarian groups report rapid deteriorations in times when violence escalates. In Yemen, the level of undernourishment has increased substantially over the past 10 years as the conflict continues: PoU hit 41.4 per cent in 2020. PoU has remained low to moderate in GCC countries and MICs, with some increases in Jordan and Lebanon in recent years, especially among refugee populations.[110]

The population's perception of food insecurity, often measured with the Food Insecurity Experience Scale (FIES), complements analysis derived from PoU figures as it is quicker to capture changes in the food security situation. Available data from 2015 for some Arab countries show low levels of food insecurity in GCC countries, while most countries in conflict and LDCs show high and increasing rates. MICs present some disparities, with food insecurity levels decreasing in Algeria and Egypt, while increasing in Jordan, Lebanon, Morocco and Tunisia.[111]

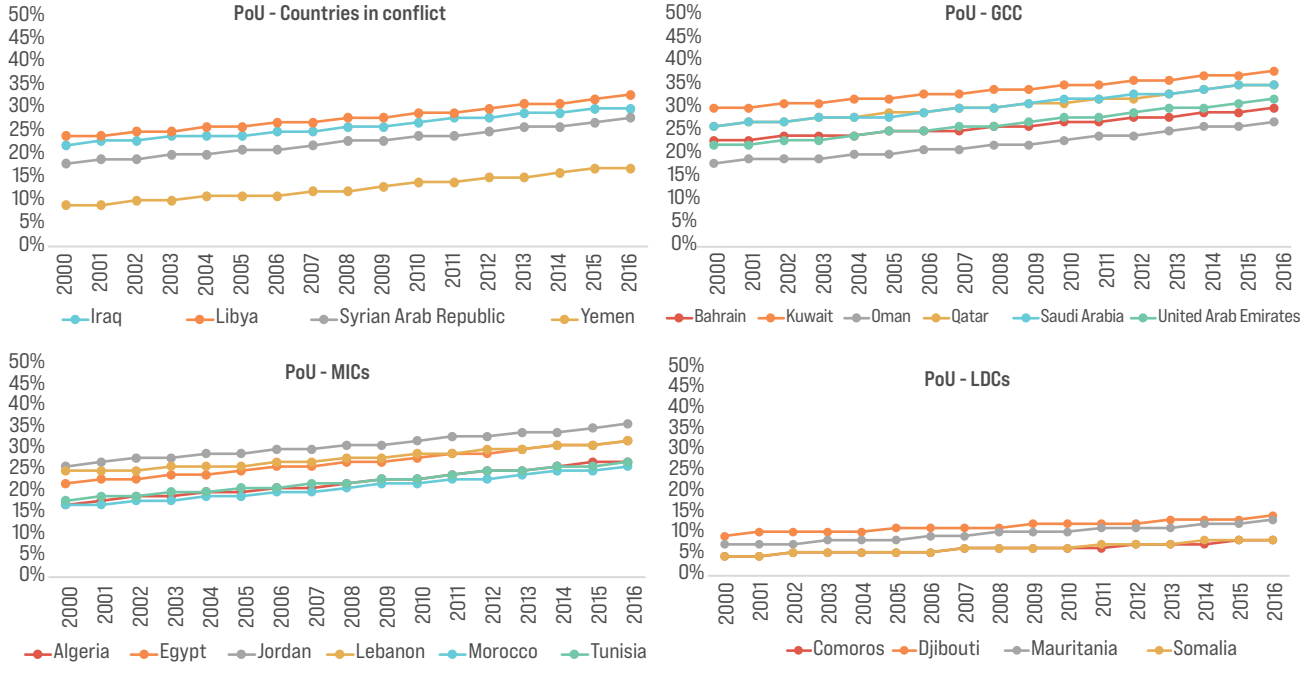
Obesity rates have been increasing in all countries in which data are available, reflecting changes in traditional diets and a lack of awareness of healthy nutritional practices. In general terms, obesity levels remain low in LDCs while they are high and rising in GCC countries and MICs. Countries in conflict such as Iraq, Libya, the Syrian Arab Republic and Yemen have also experienced increases in obesity rates in recent years.[112]

**Figure 27.** The Food Insecurity Experience Scale trends by group of countries, 2015–2020



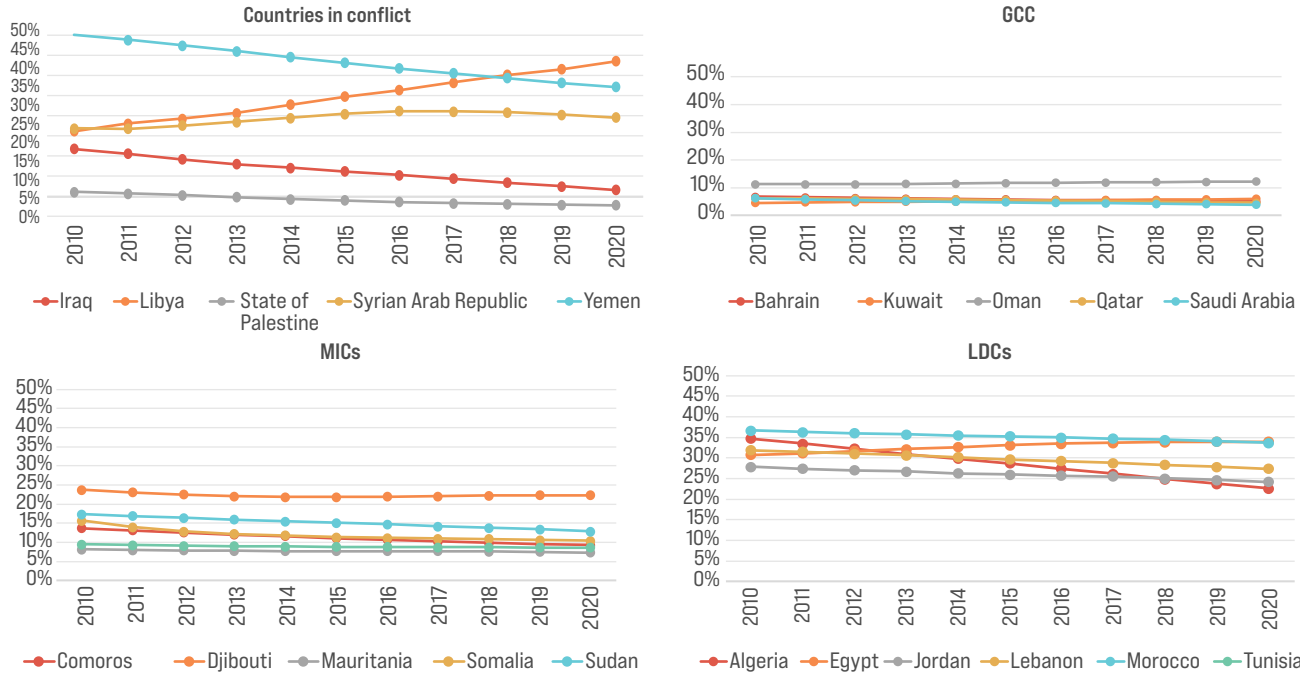

**Source:** FAOSTAT.

**Figure 28.** Prevalence of obesity trends by group of countries, 2000–2020




**Source:** World Health Organization (WHO).

**Figure 29.** Child stunting trends by group of countries, 2001–2020




**Source:** FAOSTAT.

The health consequences of inadequate diets are distributed unequally in the region. For example, iron-deficiency anaemia, which affects one in three women of reproductive age, is more common in LDCs than in GCC countries. Generally, rates of anaemia have been stagnant across the region, but in Jordan anaemia rates have increased since 2010, likely due to the influx of refugees. Yemen has the highest rate of iron-deficiency anaemia in the region, exceeding 60 per cent of women of reproductive age.[113]

Long periods of malnutrition are reflected in the prevalence of stunting among children, defined as when a child does not reach an appropriate height for their age due to nutritional deficiencies. In GCC countries and MICs, levels of child stunting have stagnated, while in countries in conflict and LDCs there have been striking disparities. Rates of stunting in the Comoros, Iraq, the State of Palestine, Somalia and Yemen have decreased in the last decade. However, Libya has experienced significant growth in child stunting rates since 2010, perhaps due to the escalation of conflict, or perhaps due to improvements in data collection mechanisms.

## C. The convergence of multiple crises, 2020–2022

Since 2020, a series of global and national socioeconomic, political and environmental shocks have affected many countries in the Arab region, jeopardizing progress made in food security in the last decades, and accentuating inequality. In some instances, multiple overlapping crises have affected the same country, diminishing resilience and deepening inequalities. Multiple crises feed into each other and, by reducing resilience, the combined impact of overlapping crises is much more harmful to society than the sum of each individual crisis at a given point in time would be.


The COVID-19 pandemic and the war in Ukraine heavily impacted global markets between 2020 and 2022; economic growth slowed and commodity prices increased globally. Some countries in the Arab region, with already fragile economic and institutional systems, were particularly affected. Import-dependent countries suffered from high inflation and diminishing foreign reserves, while households saw their living standards squeezed by rising food and energy prices. At the same time, rising external debts combined with weak financing mechanisms have limited the capacity of many low- and middle-income countries to respond. Lebanon and the Sudan have experienced unprecedented levels of inflation combined with sharp currency devaluations and debt distress.

Multiple countries in the region experienced political crises and conflict between 2020 and 2022, resulting in the loss of lives, the destruction of physical infrastructure and the forced displacement of large numbers of people. The Syrian Arab Republic has witnessed unprecedent devastation and displacement since 2011, while Yemen is still in the midst of a widespread conflict. In Libya, political tensions remain high, 12 years after conflict erupted. Somalia has experienced decades of armed violence and political instability. In post-conflict Iraq, insecurity, displacement and damaged housing hamper people's livelihoods, while the State of Palestine continues to experience the effects of the longest military occupation in modern history.

The Sudan faces multiple challenges in its transition towards civilian rule and Lebanon continues to experience political gridlock amongst its ruling elite while its economic and financial crises continue to take a heavy toll on the majority of the population.

Extreme weather events are occurring more frequently in the Arab region, causing loss of livelihoods and millions of people to be displaced. Several countries have experienced an increase in extreme temperatures and more consecutive dry days over the past three years, which has led to a higher prevalence of drought, but also increased risk of floods, sandstorms, reduced agricultural production and water scarcity. The situation was particularly dire in Iraq, Somalia, the Sudan and the Syrian Arab Republic.

Table 2 presents the economic, political and environmental shocks experienced by the countries in the region, including key variables in each dimension and classifying shocks into amber and red alerts. Details on variable selection and thresholds for classification can be found in annex 1.

**Lebanon** has been experiencing overlapping shocks, including a severe financial crisis, the COVID-19 pandemic, the effects of the war in Ukraine and the explosion in the Port of Beirut. The Lebanese economy

## Port explosion in Lebanon

In August 2020, Lebanon experienced the most powerful non-nuclear explosion in history, causing over 200 deaths, $15 billion of damages, and leaving about 300,000 people homeless. About 77,000 houses and three hospitals were destroyed. In addition, potentially hazardous gases, notably ammonia gas and nitrogen oxides, were released into the environment. The country declared a state of emergency for two weeks after the explosion, during which time it experienced social unrest and large-scale protests.

has been deteriorating since October 2019 at an exceedingly rapid rate usually associated with conflict. Nominal GDP has decreased from $52 billion in 2019 to $23 billion in 2021, causing disposable incomes to fall by 36.5 per cent.[114] The Lebanese pound continues to depreciate, causing prices to keep rising and inflation to ascend to one of the highest rates in the world.[115] Between October 2019 and October 2022, prices have increased by 1,574.39 per cent.[116] The combination of falling incomes and rising inflation has triggered a sharp uptick in poverty, from 42 per cent in 2019 to 82 per cent in 2021. Nearly 4 million people (of a population of 5.6 million) live in multidimensional poverty.[117] The economic crisis in Lebanon has run in tandem with political crises and social unrest, with 5,189 protests recorded between 2020 and 2022.[118] Lebanon continues to host large numbers of refugees due to the ongoing conflict in the Syrian Arab Republic, although the numbers of refugees and IDPs are decreasing overall.

**Yemen** faces a desperate humanitarian crisis as a result of years of continued conflict, coupled with harsh economic conditions and environmental crises. By the end of 2021, 20.7 million people in Yemen were in need of humanitarian assistance (of a population of 29 million) and 4.3 million people were internally displaced, with many people suffering from repeated displacement due to conflict and natural disasters.[119] The value of the Yemeni rial depreciated to historic lows in 2021, causing food price inflation to reach 150 per cent since the start of the war, pushing 78 per cent of Yemenis into poverty.[120] The dire economic situation was accompanied by widespread protests in the south in the latter half of 2021.[121] Hostilities increased in early 2022, especially in the Ma'rib and Shabwa Governorates.[122] Civilians were killed and key infrastructure was destroyed. In total, the period 2020–2022 recorded 23,988 violent events and 1,826 protests.[123]

The conflict in the **Syrian Arab Republic** continues to destroy livelihoods more than a decade since it commenced in 2011. The country accounted for the largest number of violent events in the Arab region between 2020 and 2022, a total of 30,466.[124] After slowing temporarily, high-intensity conflict returned in 2020. By 2022, the country was facing one of its worst situations since the start of the war.[125] The number of people in need of humanitarian assistance rose from 1.2 million in 2021 to 14.5 million in 2022 and up to 15.3 million in 2023.[126] The situation further deteriorated following the February 2023 earthquake that led to thousands of deaths and displaced millions of people.

The Syrian Arab Republic experienced its worst drought in 70 years in 2021. Almost 30 per cent of days, between 2020 and 2022, recorded extreme heat[127] and over 6 million people were affected.[128] In the northern region of the Syrian Arab Republic, water control is a particularly sensitive topic linked to conflict. The extreme low rains caused shortages of drinking and agricultural water, which caused a decrease in agricultural productivity. The wheat harvest went down from 2.8 million tonnes in 2020 to just 1.05 million tonnes in 2021.[129] Electricity supply was also affected. Incidence of water-borne diseases increased, especially in Al-Hasakah, Aleppo, Raqqa and Deir ez Zour.[130]

**Iraq** is experiencing violent attacks by the Islamic State group, border hostilities, tribal conflict and criminal activity. Frustration over deficient public services, including frequent electricity cuts high inflation and high unemployment rates, has led to multiple protests.[131] In total, 4,320 protest events were recorded between 2020 and 2022.[132] The Government of Iraq has been following a policy of relocating IDPs. About 16 IDP camps were closed between 2019 and 2021.[133] It is estimated that 4.97 million people have been returned to their areas of origin since 2017, while 1.1 million IDPs remain in camps.[134]

Between 2020 and 2022, 7 million people were affected by extreme weather conditions.[135] Extreme temperatures (30 per cent of days recorded extreme heat) and an increase in consecutive dry days (12.58 per cent higher than the historical average)[136] caused intense droughts, particularly in 2021. The lack of rain affected agricultural productivity, resulting in crop failures and diminished farmer incomes. In 2021, 37 per cent of farmers planting wheat and 30 per cent of those planting barley suffered from crop failures.[137] Water reserves decreased by half, exacerbating drinking water shortages.[138] Drought increased the susceptibility of land to flooding and sandstorms. In 2021, floods struck the Kurdish regions in the north of the country, causing deaths and damages in Erbil and the surrounding areas.[139]

**Table 2.** Classification of shocks experienced by the countries in the region

| | Economic shocks | | | | Political shocks and conflict | |
|---|---|---|---|---|---|---|
| Country | Inflation from October 2019 to October 2022 (percentage) | Reserves 2021 (months of imports) | Debt 2022 (percentage of GDP) | Energy security index 2022 | Number of protests 2020-2022 | Number of violent events 2020-2022 |
| Algeria | | 25.22 | 62.75 | 57 | 4,022 | 313 |
| Bahrain | 0.85 | 14.47 | 119.5 | 44 | 1,250 | 178 |
| Comoros | | 6.80 | 34.5 | | 37 | 33 |
| Djibouti | | 5.41 | 50.1 | | 51 | 17 |
| Egypt | 30.54 | | 89.2 | 46 | 177 | 982 |
| Iraq | 12.40 | | 36.7 | 100 | 4,320 | 13,995 |
| Jordan | 6.95 | | 91.0 | 96 | 666 | 88 |
| Kuwait | 9.91 | | 7.1 | 49.00 | 42 | 2 |
| Lebanon | 1,574.39 | | 180.7 | 106 | 5,189 | 2,084 |
| Libya | 10.08 | | | | 362 | 1,424 |
| Mauritania | 19.63 | 5.40 | 50.7 | 73 | 4,231 | 219 |
| Morocco | 11.36 | 4.07 | 70.3 | 75 | 789 | 49 |
| Oman | 4.23 | 11.59 | 45.4 | 69 | 13 | 10 |
| State of Palestine | 4.98 | 9.59 | 44.7 | | 2,135 | 10,469 |
| Qatar | -1.94 | 22.27 | 46.9 | 52 | 24 | 1 |
| Saudi Arabia | 1.51 | | 24.8 | 49 | 5 | 182 |
| Somalia | | 6.81 | *** | | 264 | 7,966 |
| Sudan | 2,912.96 | 1.01 | 189.5 | | 3,086 | 1,929 |
| Syrian Arab Republic | | 1.26 | | | 1,239 | 30,466 |
| Tunisia | 22.37 | | 88.8 | 62 | 3,319 | 649 |
| United Arab Emirates | | 4.38 | 30.7 | 57 | 6 | 9 |
| Yemen | ** | 13.76 | | | 1,826 | 23,988 |

| Political shocks and conflict | | Environmental shocks | | | |
|---|---|---|---|---|---|
| Country | Change in the number of refugee and IDP populations from 2019 to 2022 | Days of extreme heat 2020–2022 (percentage) | Change in heavy precipitation days (>20 mm; R20) in 2020–2022 compared to historical average (percentage) | Change in consecutive dry days in 2020–2022 compared to historical average (percentage) | People affected by natural disasters 2020–2022 |
| Algeria | 1,574 | 29.78 | -51 | 15.74 | 67,191 |
| Bahrain | 140 | 25.40 | -100 | -1.59 | |
| Comoros | 19 | | | | |
| Djibouti | 4,740 | 31.13 | 15 | -1.21 | 302,168 |
| Egypt | 34,779 | 24.44 | 19 | -0.59 | 26,635 |
| Iraq | -223,173 | 30.08 | -39 | 12.58 | 7,017,203 |
| Jordan | 92,533 | 27.73 | -61 | 0.78 | |
| Kuwait | 27 | 29.48 | -53 | -2.90 | |
| Lebanon | -75,128 | 27.19 | -25 | -17.64 | |
| Libya | -201,235 | 21.02 | -68 | 10.75 | |
| Mauritania | 8,953 | 29.86 | -10 | 4.16 | 1,385 |
| Morocco | 32,226 | 34.09 | -44 | 10.43 | 1,448,908 |
| Oman | 226 | 24.25 | -6 | -21.59 | 190 |
| State of Palestine | 105,662 | 25.18 | -69 | -4.70 | 33,500 |
| Qatar | 207 | 26.91 | -100 | -10.65 | |
| Saudi Arabia | 11,176 | 29.92 | -48 | -5.74 | 600 |
| Somalia | 317,122 | 27.48 | -38 | 5.95 | 8,815,436 |
| Sudan | 1,220,822 | 28.19 | 18 | 9.12 | 1,543,180 |
| Syrian Arab Republic | 616,493 | 29.49 | -49 | 11.11 | 6,144,782 |
| Tunisia | 6,251 | 28.92 | -53 | 14.86 | 45,000 |
| United Arab Emirates | 49 | 28.94 | -86 | -8.13 | |
| Yemen | 481,169 | 26.98 | 7 | -12.47 | 630,138 |

** Official figures from the Government of Yemen show an increase of 103 per cent in prices from 2014 to 2021. Price levels for 2019 and 2022 are currently lacking. The IMF estimates high levels of interannual inflation: 23.1 per cent in 2020, 45.7 per cent in 2021 and 43.8 per cent in 2022.

*** 101 per cent in 2018.

## The earthquake in northern Syria

In February 2023, two earthquakes of magnitude 7.8 and 7.6 on the Richter scale struck the Syrian Arab Republic and Türkiye. At least 8.8 million were affected and 5,791 people died in the Syrian Arab Republic.

After over a decade of conflict, the Syrian Arab Republic was already suffering from weak infrastructure and high numbers of vulnerable populations, including 6.8 million IDPs. In north-west Syria, more than 90 per cent of the population depended on humanitarian aid before the earthquake and had minimal means with which to withstand emergencies. After the disaster, the limited government response, the lack of equipment and fuel to carry out rescue operations, and adverse weather conditions delayed the much-needed assistance. In addition, the ongoing conflict made it difficult to reach populations in certain areas, making it hard to assess damages and send aid.

It is estimated that over 5 million people in the Syrian Arab Republic were displaced because of the earthquake and 100,000 in Aleppo alone were left homeless. Women and children have been disproportionately affected. Initial estimates pointed to close to a million women of reproductive age affected, out of which 148,000 were pregnant at the moment of the earthquake and 30,000 expected to deliver in the following 3 months. Vital infrastructure, including hospitals, water reservoirs and around 239 schools, was damaged.

**Source:** United Nations High Commissioner for Refugees (UNHCR), 2023. Available at https://www.unhcr.org/news/briefing/2023/2/63e652994/unhcr-5-million-displaced-syria-quake.html.

**The Sudan** has experienced a combination of economic, political and environmental crises in the last three years that has led to widespread poverty and food insecurity. The county experienced high political instability and civil unrest from 2020 to 2022, with multiple protests that culminated in the establishment of a two-year transitional Government in December 2022. In total, 3,086 protests were recorded in the 2020–2022 period,[140] with hundreds of protesters killed by security forces and thousands injured.[141] The Sudan has been experiencing a high influx of refugees and IDPs, with an increase of over 1.2 million in the last three years alone.[142] Floods, droughts and violence are the main causes for the large numbers of IDPs, while most refugees come from South Sudan.

The political unrest in 2020–2022 coincided with a period of deep economic change in the Sudan. In 2019, the country started implementing a package of macroeconomic reforms – including fiscal and monetary tightening, tax reform and promotion of the private sector – which made it eligible for the World Bank-IMF debt release initiative in June 2021. These attempts to address economic imbalances led to high increases in prices. Further changes in the Government led to a temporary halt of the reforms and a reduction in international aid while inflation continued to spike. Inflation in the Sudan was among the highest in the world, with a rise in prices of 2,913 per cent[143] from October 2019 to October 2022, causing social unrest and pushing many families into food insecurity. With the transition Government established in December 2022, political stability was expected to increase and inflation ease during 2023.[144] Rising tensions in April 2023, however, may affect these predictions.

The Sudan experienced heavy flooding between July and September 2020 and again in July and August 2022, affecting over 1.5 million people.[145] The increasing consecutive dry days (9.12 per cent more in the 2020–2022 period compared to the historical average),[146] combined

with more frequent heavy rainfall days (18 per cent more than the historical average),[147] led to an increased risk of flooding as drought-affected ground presents lower water absorption. Following the 2022 floods, close to 25,000 houses were destroyed and about 150 people died.[148] The poor state of infrastructure made reaching certain areas difficult, which delayed food distribution to isolated populations. Floods have exacerbated the incidence of diseases such as cholera, dengue and malaria.

**Somalia** has been suffering from a serious humanitarian crisis due to an extended drought, a locust invasion, ongoing conflict and weak economic conditions. Political tensions and violence continue after three decades of conflict. A total of 7,966 violent events were recorded during the 2020–2022 period.[149] The delayed elections in 2021 caused international assistance to be temporarily halted, leading to liquidity pressures,[150] while outbreaks of violence caused between 60,000–100,000 people to be displaced in April 2021.[151] The number of civilian casualties increased in 2022, to the highest number recorded since 2017. It is estimated that between January and November 2022, 613 civilians were killed and 948 injured, mostly due to improvised explosive devices attributed to the armed group Al-Shabab.[152]

In addition to the political and economic instability, the country has been experiencing one of the worst droughts in 40 years.[153] With five consecutive failed rainy seasons by the end of 2022, almost 9 million Somalis have been affected.[154] Over 5 million people have been pushed into acute food insecurity and over one million displaced.[155] There has been widespread destruction of crops, death of livestock and outbreaks of disease. The drought is expected to continue well into 2023, further aggravating the situation. This catastrophe comes after a decade of low rains and humanitarian emergencies, starting with the famine in 2011 and followed by the massive destruction of crops due to the locust plague in 2020–2021.

The rates of land degradation in Somalia make it one of the most vulnerable countries in the world to climate change effects. Between 2000 and 2015, Somalia lost 147,704 $km^2$ to land degradation – the equivalent of 26.7 per cent of its total area.[156] This was due, in part, to overgrazing, deforestation and poor agronomic practices. Effective humanitarian action combined with development plans to mitigate and adapt to extreme weather conditions are key to reversing this trend.

## Famine in Somalia

Famines are declared when the food security situation reaches extreme levels: 30 per cent of children experiencing wasting; 20 per cent of the population having extreme lack of food; and two hunger-related deaths per 10,000 people per day. This definition was developed following the humanitarian emergency due to the drought in Somalia in 2011, when nearly 260,000 people died, half of them children.

**Source:** The United Nations Convention to Combat Desertification (UNCCD), National Voluntary Land Degradation Neutrality Targets, 2020.

## Locust plague

In 2019, a severe locust plague affected parts of East Africa and the Arabian Peninsula, including Somalia. Desert locusts are especially dangerous given that they breed quickly and can travel up to 150 km/day, destroying large quantities of vegetation and causing massive loss of livelihoods. Even a small swarm (1 $km^2$) can consume in a day as much food as 35,000 people, with larger swarms consuming as much food as 81 million people.

# D. Unequal effects of the multiple crises on food security

Food security has been significantly impacted by the crises the region has experienced over the past three years.

While official data are not yet available at the country level, a variety of sources indicate a general deterioration of food security, moving further away from ending hunger and malnutrition for all. According to the FAO,[157] undernourishment and food insecurity rates have increased globally since 2019. It is estimated that in the Western Asia and North Africa region the PoU rose from 7.9 per cent in 2019 to 8.6 per cent (45.8 million people) in 2021. At the same time, the prevalence of moderate to severe food insecurity increased from 27.8 per cent in 2019 to 33.8 per cent in 2021, affecting a total of 180.8 million people in 2021.

Once impacted, vulnerable populations lack coping strategies to effectively recover, thus exacerbating inequalities. The levels of both moderate and severe food insecurity grew alarmingly in 2020, rising as much as in the five previous years combined. This was followed by an increase in severe food insecurity in 2021, demonstrating that the situation of affected populations is deteriorating not easing.[158] Certain demographics, such as women and refugees, are affected most severely. Women already presented a higher incidence of food insecurity compared to men before 2020, a gap which has widened in recent years.[159]

At the country level, the Integrated Food Security Phase Classification (IPC) offers a classification of food security using near real-time data on the risk of acute food insecurity and famine. The IPC categorizes acute food insecurity situations in five phases according to their severity level: 1-Minimal, 2-Stressed, 3-Crisis, 4-Emergency, 5-Famine. There is a call for urgent action for crisis level (phase 3) or above. While not appropriate for monitoring the achievement of food security goals, the IPC data offer a good assessment of the magnitude of the situation.

**In Lebanon,** 1.98 million Lebanese residents and Syrian refugees were in urgent need of humanitarian action due to acute food insecurity between September and December 2022. Of these, 306,000 people were estimated to be at emergency levels. Among Syrian refugees, food insecurity was particularly prevalent, with 46 per cent of the population at crisis level or above. Rural communities were especially impacted, with 95 per cent of agricultural households interviewed stating they would require humanitarian assistance in the next 3–6 months.[160]

**In Somalia,** 5.6 million people experienced high levels of food insecurity between October and December 2022. Among these, 1.5 million people were classified as being at emergency level. Some populations were disproportionately affected, such as agropastoral communities in Baidoa and Burhakaba districts and displaced populations in Baidoa town and in Mogadishu. A country assessment conducted in August 2022 estimated that 1.8 million children faced acute malnutrition, including 513,550 children who may be severely malnourished.[161]

**In Yemen,** 17 million people, more than half the country's population, were facing acute food insecurity between October and December 2022. Of these, 6.1 million were classified as being in an emergency situation. Yemen is one of the most food insecure countries in the world as conflict, extreme weather events and inflation continue to disrupt the lives of millions of people.[162]

**In the Sudan,** 9.6 million people were experiencing acute food insecurity between April and May 2022, including 2.3 million at emergency level. Food security has deteriorated during 2022; the share of the population affected by crisis levels of food insecurity is projected to have increased from 13 per cent in October 2021 to February 2022 to 24 per cent in June to September 2022, pushing an additional 2 million people into acute food insecurity. The regions of northen, western and central Darfur, Khartoum, Kasala and the White Nile have been particularly affected.[163]

# E. Country case studies

## 1. Egypt

With an estimated 104 million inhabitants in 2022,[164] Egypt is the most populated country in the Arab region. Over the last decade, Egypt has experienced growing poverty, inequality and food insecurity. Poverty rates increased between 2010 and 2020 from 34 to 36 per cent.[165] Inequalities also widened; the share of income gained by the top 1 per cent of earners was 13 per cent higher in 2021 than in 1990 while the share of income earned by the bottom 50 per cent decreased by 9 per cent.[166]

Food insecurity and obesity rates remain elevated. About 27 per cent of the population suffered from food insecurity in 2020, almost the same share as in 2010 (28 per cent). Obesity among adults (aged 18+ years) increased from 28 per cent in 2010 to 32 per cent in 2016, disproportionately affecting women.[167] Undernourishment has remained relatively low (5.1 per cent in 2020),[168] perhaps due to the food subsidy system that enabled most of the population to access basic foodstuff through the years.

Egypt's rapid population growth and urbanization pose significant challenges to its food systems. National food production, while very important, remains limited. The agricultural sector in Egypt represented 12 per cent of GDP and 21 per cent of employment in 2020[169] and is characterized by small-scale, mostly irrigated farms with high yields. Egypt, however, has a low ratio of arable land per capita (0.03 hectares per person in 2020)[170] and, consequently, will remain reliant on food imports. In 2018, Egypt imported 47.8 per cent of the wheat it consumed,[171] around 12.5 million metric tonnes,[172] making it one of the largest wheat importers in the world. The food import dependency and limited capacity to increase national production make the country vulnerable to global food price fluctuations, which disproportionally affect those living in poverty and the most vulnerable.

### a. Economic inequality and food consumption

The Household Income, Expenditure, and Consumption Survey (HIECS) carried out by the Government of Egypt during 2019–2020 allows analysis of inequalities in food expenditure.

The HIECS report categorizes households into 19 groups according to their yearly household consumption, with the lowest group spending under 10,000 Egyptian pounds (EGP)/year (around $635) and the highest group spending over 200,000 EGP/year ($12,698). Given the limited sample in the bottom expenditure group, for the purpose of this analysis, households spending 10,000–19,999 EGP/year ($635–1,270) are taken as the lowest group. Households spending over 200,000 EGP/year represent 1.7 per cent of the population, while households spending 10,000–19,999 EGP/year represent 3.1 per cent.

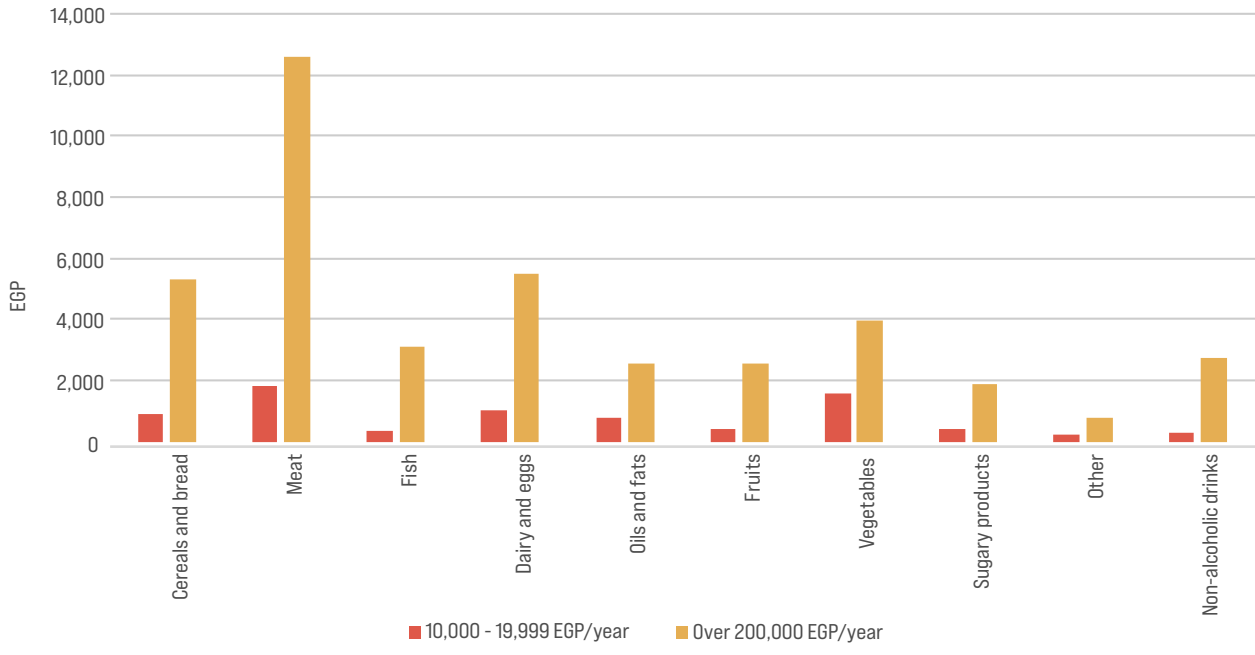
Following the regional trends, we find substantial inequalities in consumption outcomes. In 2020, households in the highest expenditure group had an overall yearly expenditure 15.8 times higher than some of the poorest households (spending 10,000–19,999 EGP/year). Similarly, urban populations spent 30 per cent more than rural populations.[173]

Differences in food expenditure, while considerably lower than in general expenditure, remain high. The wealthiest group spent over five times more than the poorest on food in 2020. The biggest disparities were found in fruit, fish and meat expenditure, with wealthier groups spending 6.5–8.5 times more than the poor. The average amount spent on meat by the wealthy is higher than many poor households' total expenditure, including healthcare, education costs and rent.

Despite spending less than the rich in absolute terms, food expenditure represents 41 per cent of poor households' budget, compared with only 13 per cent for the rich.

Poverty is not only reflected in lower food expenses, but also in less healthy and varied diets. For the poorest households, oils and fats, vegetables and sugary products represent a proportionally higher share of their food expenditure than for the rich. The poorest populations spend proportionally less on other food groups – such as meat, fish, dairy and eggs and fruits.

**Figure 30.** Food group expenditure by population group, 2019–2020




**Source:** ESCWA calculations based on the Household Income, Expenditure, and Consumption Survey (HIECS).

**Table 3.** Proportion of food budget spent in each food group according to household total yearly consumption (Percentage)

| Population group according to their yearly consumption | Oils and fat | Vegetables | Sugary products |
|---|---|---|---|
| >200,000 EGP | 6.1 | 9.7 | 4.6 |
| 10,000–20,000 EGP | 9.9 | 19.9 | 5.4 |

| Population group according to their yearly consumption | Cereals | Meat | Fish | Dairy and eggs | Fruits |
|---|---|---|---|---|---|
| >200,000 EGP | 12 | 30.7 | 7.6 | 13.4 | 6.2 |
| 10,000–20,000 EGP | 11.3 | 23.4 | 4.7 | 13.2 | 5.2 |

**Source:** ESCWA calculations based on the HIECS.

Some socioeconomic factors, such as geographic location and education, are also associated with less healthy diets. Rural populations and illiterate people spend a greater proportion of their food expenditure on cereals, sugar and fats than their urban and literate counterparts. This reflects the need for policies targeting the specific nutritional needs of different population groups.

### b. Recent economic shocks putting food security at risk

The recent economic downturn raises concerns about the food security situation in Egypt, especially after 2020. The unstable economic conditions globally and the supply chain bottlenecks created by the COVID-19 pandemic and the war in Ukraine have led to price increases and a widening trade deficit in Egypt, a net commodity importer.[174] Additionally, steep declines in foreign direct investment have resulted in significant reductions in foreign assets.

Prices of cereals, cooking oil and fertilizer rose significantly during 2020–2022, putting the country's food security at risk. The price of wheat, widely consumed in Egypt, increased throughout 2021 as a result of adverse weather conditions in the main producing countries and the increase in grain reserves in China. This situation quickly worsened with the Russian invasion of Ukraine. By May 2022, the global price of hard wheat was $444.16 per tonne, the highest recorded in the 1990–2022 period.[175] This resulted in food security concerns in Egypt, which had been importing roughly 75 per cent of its wheat from the Russian Federation and Ukraine before the war. In response, the Government of Egypt tried to incentivize domestic production with the announcement of high wheat procurement prices and looked for alternative import sources of wheat, such as India, with higher transport costs. With higher wheat production and import prices, the cost of bread subsidies kept increasing, putting additional strain on the Government's budget.

Given the high levels of debt and its large debt-servicing requirements, the Government of Egypt reached an agreement with the International Monetary Fund (IMF) in October 2022 that included a comprehensive package of economic reforms. Following the agreement, Egypt switched to a flexible exchange rate system that caused a rapid depreciation of the currency. The pound fell from 19.70 EGP/$ to 23.16 EGP/$ the first day and then dropped further to almost 30 EGP/$ by the beginning of 2023. While the new exchange rate regime should help redress the imbalances in the external accounts, the currency depreciation, coupled with global price shocks and limited domestic supply, has led to elevated inflation rates. A 31 per cent increase in prices was recorded between October 2019 and October 2022.[176]

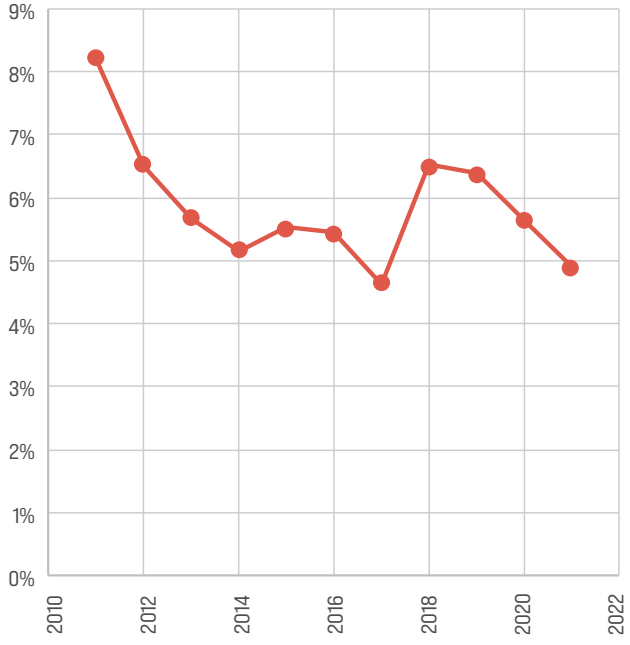
In the near future, growth is predicted to slow down.[177] Meanwhile, the increased cost of living represents a significant risk for poor and middle-class households, who spend a higher share of their budget on food compared to wealthier households. A 2022 International Food Policy Research Institute (IFPRI) study showed that families living in poverty in Egypt, when confronted with high price increases at the beginning of 2022, resorted to various coping strategies such as stopping debt repayments (84 per cent), purchasing lower-quality foods and brands (70 per cent) and reducing general food consumption (47 per cent). Some respondents reduced their expenditure on education (25 per cent) and health (43 per cent),[178] which could have long-lasting effects on their livelihoods. Raising prices poses the risk of increasing poverty rates and deepening inequalities. Some of the social policies recently announced by the Egyptian Government, such as the expansion of targeted social transfers and the establishment of a more progressive tax system, have the potential to mitigate some of these effects.

### c. Evolving food subsidies: financial and nutritional considerations

Food subsidies are especially relevant policy instruments for both food insecurity and inequality, although not exempt from controversy. They have been an instrumental part of the social contract between the Government of Egypt and its citizens since the 1940s, historically providing heavily subsidized staple foods such as bread, cooking oil or sugar for the whole population. This has represented an important safety net for those living in poverty and the lower middle classes.

Currently, there are two main food subsidy programmes: baladi bread subsidies and ration cards. The ration card subsidy is a monthly payment that allows families to purchase subsidized commodities from ration shops using electronic cards. The original system included only three commodities – rice, sugar and cooking oil – but was expanded in 2014 to include over 30 food and non-food items. When asked about their level of satisfaction with the subsidized commodities in 2017, 94 per cent of the population stated being completely or somehow satisfied.[179] The current bread subsidy allows each person to purchase up to five loaves per day at a discounted rate.

**Figure 31.** Food subsidy expenditure as a percentage of total public expenditure in Egypt, 2011–2021




**Source:** ESCWA calculations based on data from the ESCWA Social Expenditure Monitor. Available at https://sem.unescwa.org/.

There are a few factors to consider regarding the effectiveness and efficiency of food subsidies. The wide coverage of the programme implies high costs for the Government. Food subsidies have represented between 4.5 per cent and 8 per cent of total public expenditure in the last decade. Inflation and population growth are making it increasingly expensive to continue to finance blanket subsidies, which some consider to be a less efficient way of protecting the most vulnerable compared to more targeted social protection policies. In addition, blanket subsidies are associated with market distortions, inflationary pressures, food wastage and the existence of a black market for reselling subsidized commodities. These factors have triggered multiple attempts to reform the food subsidy system and to reduce market distortions. In 2014, for example, the Government stopped subsidizing flour bakeries to produce bread and moved to subsidizing bread loaves directly.

However, food subsidies may be an effective tool to reduce inequalities in food access. According to a 2018 IFPRI study, wheat subsidies in Egypt have progressive wealth redistribution effects and are generally supportive of those living in poverty. This is in direct contrast with the regressive effects of other types of subsidies, such as on gasoline and diesel, which are shown to disproportionally benefit the wealthy and, consequently, widen inequalities.[180]

While targeted social protection policies might be more efficient than blanket subsidies, effective implementation is required. In the past, freed-up resources from reductions in other types of subsidies – notably energy – have not translated to meaningful increases in social expenditure in Egypt,[181] despite some recent improvements.[182] In the absence of well-designed targeted social protection programmes and the right institutions to implement them effectively, eliminating food subsidies could lead to vulnerable households being left unprotected and to increased food insecurity and social unrest.

In recent years, the social protection system in Egypt has switched slowly towards increased targeted cash transfers, as provided by the Takaful and Karama programme, while limiting in-kind subsidies. Consequently, the number of beneficiaries and the amount received per family in food subsidy programmes decreased in the 2017–2020 period. In 2017, 89 per cent of households had ration cards and 90 per cent benefited from subsidized bread,[183] while, in 2019, 65 per cent of households received food ration cards and 73 per cent benefited from the bread subsidy.[184] Similarly, the amount covered by ration cards out of total food expenditure and bread transfers out of total cereal expenditures has declined from 2017 to 2019–2020, as shown in tables 4 and 5.

The impact of food subsidies on health has also generated some controversy. Food subsidies have traditionally incentivized excessive consumption of calorie-rich products with excessive fat and sugar content. An IFPRI study in 2016 found that high levels of subsidy from the pre-2014 ration card – which included only cooking oil, rice and sugar – were associated with excessive weight in urban women and children.[185] Expanding the programme to cover a wider range of foods may have dissipated some of these effects, with potential improvements in health outcomes. The ration card system, however, does not yet include any fresh vegetables and fruits.

There are some potential reforms that can be undertaken to increase the effectiveness of the food subsidy system. Firstly, improving targeting to ensure that all vulnerable

**Table 4.** Ration card as a percentage of total food expenditure (Percentage)

| | All households | Households spending 10,000–19,999 EGP/year | Households spending over 200,000 EGP/year |
|---|---|---|---|
| 2017 | 10 | 14 | 3 |
| 2019–2020 | 7 | 11 | 2 |

**Source:** ESCWA calculations based on the HIECS.

**Note:** Average percentage of ration card transfers out of total food expenditure according to population groups divided by their yearly expenditure level. The data includes households with and without access to food subsidies.

**Table 5.** Bread subsidy as a percentage of cereal expenditure (Percentage)

| | All households | Households spending 10,000–19,999 EGP/year | Households spending over 200,000 EGP/year |
|---|---|---|---|
| 2017 | 3 | 5 | 1 |
| 2019–2020 | 1 | 2 | 0.3 |

**Source:** ESCWA calculations based on the HIEC.

households are included. In 2017, 6 per cent of households with a per capita income under 8,000 EGP were not covered by the ration card.[186] Additionally, incorporating nutrition criteria can help adapt the programme to households' specific needs and provide nutritional education and awareness campaigns when necessary. Including products, such as vegetables and fruits, and reducing non-essential items can provide further incentives to improve diets.[187] Finally, progressively eliminating price controls so that food prices reflect changing production and import costs can help reduce market distortions. The ration card system would then work as a cash transfer system enabling those living in poverty to purchase food products at market prices. It is worth noting that cash transfer programmes have the risk of increasing inflation compared to in-kind subsidy programmes and should be used with caution when inflationary pressures are already a concern.

## 2. State of Palestine

Palestinians in the occupied Palestinian territory continue to suffer from impoverishment and general lack of development, caused mainly by the Israeli ongoing military occupation and the policies and practices it has employed[188]. This includes restrictions on access and the movement of people and goods, construction and economic activity in Area C, as well as settlement activity. The Israeli blockade on the Gaza Strip since 2007 manifests the most severe form of these restrictions. Coupled with recurrent military offensives against Gaza, the impact of this blockade has had catastrophic social and economic impacts.[189]

The State of Palestine, consequently, is facing high rates of inequality, unemployment, poverty and food insecurity, with 2.1 million people – half of them children – in need of humanitarian assistance.[190] In 2022, poverty affected 26.6 per cent of Palestinians,[191] with similar rates of food insecurity (28.7 per cent in 2020),[192] and even higher rates of anaemia among women of reproductive age (31 per cent in 2019).[193] There are, however, significant inequalities among population groups. In 2021, 66 per cent of the wealth of the State of Palestine was managed by the richest 10 per cent while the bottom 50 per cent owned just 3.3 per cent of the resources.[194] Populations living in Gaza, Bedouin communities and refugees are among the poorest and the most affected by food insecurity.

One of the factors contributing to a fragile food security situation in the occupied Palestinian territory is limited agricultural capacity. Israel controls most of the fertile

land and water resources and restricts permanent investment and other economic activity that could modernize the sector. For example, Israel has rejected 99 per cent of construction projects to develop Area C in the West Bank[195] and prevented any Palestinian activity to develop water infrastructure. In Gaza, repeated Israeli air strikes and bombardments have damaged agricultural and water infrastructure and the restriction of the import construction material has delayed reconstruction and rehabilitation. While vital for food security and rural livelihoods, agriculture employs only about 6 per cent of the Palestinian population.[196]

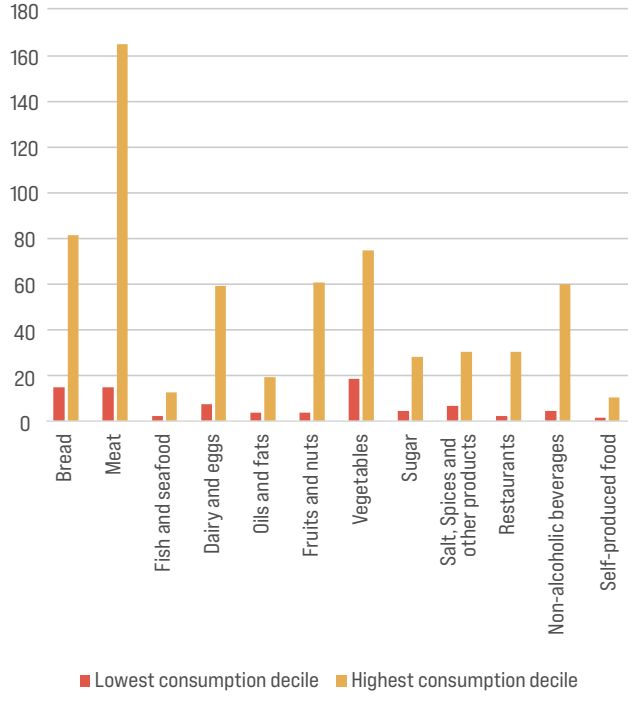
Consequently, the State of Palestine is highly dependent on international markets, importing over 95 per cent of the wheat it consumes.[197] Imports, however, are controlled by Israel. In addition, the State of Palestine has limited storage capacity, estimated at around 3 months for wheat, which leads to increased vulnerability to shortages in international food markets. Following the war in Ukraine, the State of Palestine experienced a 25 per cent increase in the cost of food staples,[198] exacerbating food insecurity among poorer families.

### a. Economic inequality and food consumption

This case study relies on data from the Palestinian Household Expenditure and Consumption Survey 2016–2017 to analyse different food consumption patterns across population groups and geographical locations. Pronounced inequalities were observed between poorer and wealthier households, with disparities explained in part by the higher incidence of food insecurity in the Gaza Strip compared to the West Bank and among populations in refugee camps compared to the rest.

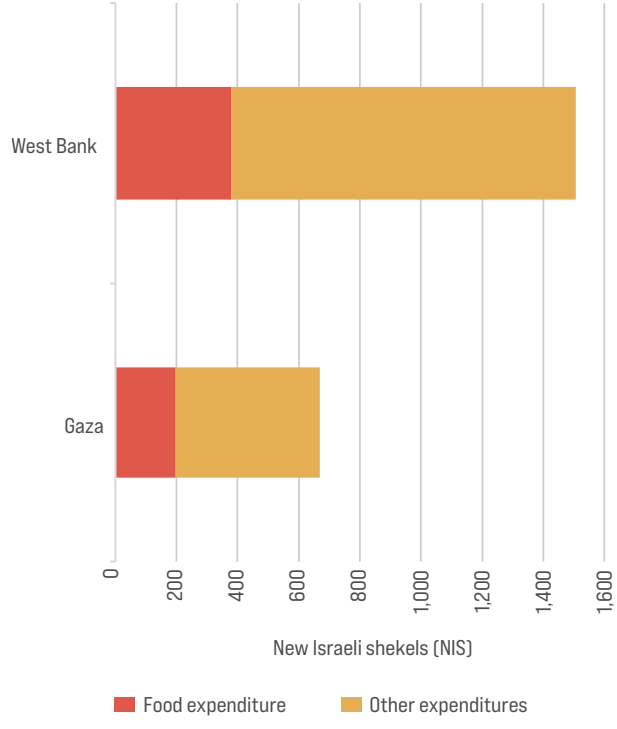
Classifying households according to their per capita total consumption, we observe that in 2017 the wealthiest decile had a total expenditure 13 times higher than the poorest decile. In terms of food, the wealthy spent almost

**Figure 32.** Per capita food expenditure in 2017 for the highest and lowest population deciles by total expenditure




**Source:** ESCWA elaboration based on the Palestinian Household Expenditure and Consumption Survey 2016–2017.

**Figure 33.** Per capita expenditure by geographical location




**Source:** ESCWA's calculations based on the Palestinian Household Expenditure and Consumption Survey 2016–2017.

7.6 times more than those living in poverty, with the biggest disparities found in non-alcoholic beverages (14.2 times more), restaurants (13 times more) and meat expenditure (11.4 times more).[199]

Food expenditure represented a higher proportion of the total budget of those living in poverty compared to the wealthy. In the population decile with the lowest per capita consumption, food accounted for 35.4 per cent of household expenses, while it was 20.6 per cent for the highest decile. In relative terms, poorer households devoted a higher proportion of their food budget to bread, oils and fats, vegetables and spices than the rich, while wealthier households spent a larger share on meat, fruits and beverages.

### b. The geography of food consumption inequalities: Gaza Strip and the West Bank

Inequalities in poverty and food security are stark across the occupied Palestinian territory. Poverty rates in Gaza are four times higher than in the West Bank, and 90 per cent of the Palestinians who are food insecure live there.[200] A 2022 United Nations Office for the Coordination of Humanitarian Affairs (OCHA) survey found a prevalence of food insecurity of 42.4 per cent in Gaza compared to 9.68 per cent in the West Bank, with 19 per cent of families in Gaza having reduced their consumption to cope with lack of food compared to 4.4 per cent of families in the West Bank.[201]

According to the Palestinian Household Expenditure and Consumption Survey, the average consumption expenditure in Gaza was about half that in the West Bank in 2017, at 670 new Israeli shekels (NIS) compared to 1,506 NIS per person per year. While food expenditure in Gaza was lower than in the West Bank, it represented a greater proportion of households' budgets: 29.3 per cent compared to 25.2 per cent. Additionally, differences in how the budget was allocated among food groups are apparent between the areas, as shown in table 6. In Gaza, households spent a greater proportion of their food budget on fish, oils and fats and vegetables than in the West Bank, but less on meat, dairy and eggs.

Inequalities are further exacerbated when comparing richer and poorer governorates. Within the West Bank, the highest consumption levels were found in Jerusalem J1, while within Gaza, the lowest were found in the Governorate of Deir Al-Balah, followed by North Gaza. The general expenditure of households in Jerusalem J1 was almost four times higher than those in Deir Al-Balah, and food expenditure was 2.7 times higher.

**Table 6.** Proportion of food budget spent in each food group according to geographical area (Percentage)

| | Bread | Meat | Dairy and eggs | Non-alcoholic beverages | Restaurants | Self-produced food |
|---|---|---|---|---|---|---|
| West Bank | 15 | 24.9 | 9.4 | 5.3 | 8.1 | 2 |
| Gaza Strip | 13.3 | 20.2 | 7.5 | 3.9 | 7.7 | 1.3 |

| | Fish and seafood | Oils and fats | Fruits and nuts | Vegetables | Sugar | Salt, spices and other products |
|---|---|---|---|---|---|---|
| West Bank | 1.7 | 2.6 | 8.7 | 13.7 | 4.4 | 4.4 |
| Gaza Strip | 3.2 | 5.1 | 8.7 | 16.6 | 5 | 7.5 |

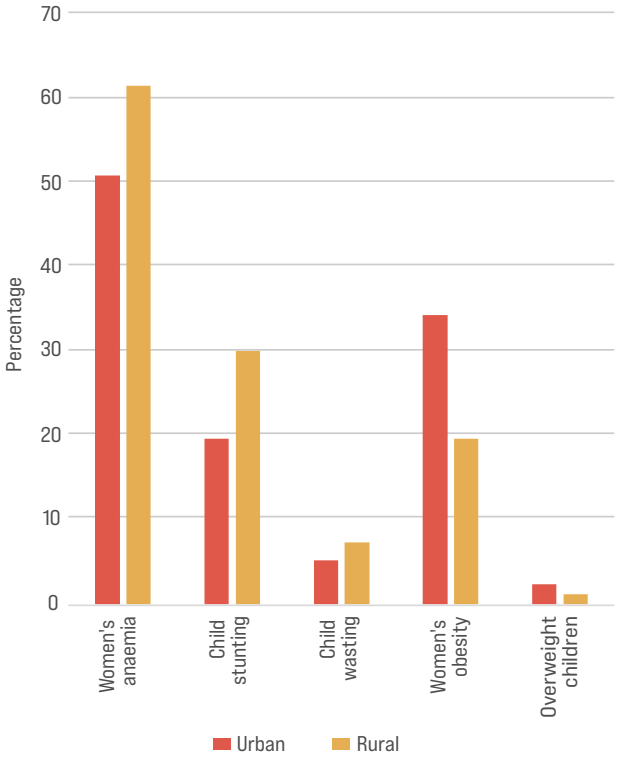
**Source:** ESCWA calculations based on the Palestinian Household Expenditure and Consumption Survey 2016–2017.

### c. Food expenditures among refugee and displaced populations

Households living in refugee camps reported 30 per cent lower total expenditure than the rest of the population, and 19 per cent lower food expenditure. In addition, food represented a higher share of the budget of people residing in camps (29.6 per cent) compared to those who were not (25.7 per cent). Inequalities among populations living in refugee camps and the rest were more pronounced in the West Bank than in Gaza, where the population is poorer on average.

For most food groups, refugee populations living in camps exhibited lower expenditure in absolute terms than the rest of the population. Some exceptions include higher expenditure on oil and fats, especially among populations living in camps in the West Bank, and lower amounts of self-produced food.

**Figure 34.** Differences in the prevalence of food insecurity-related problems in rural and urban areas




**Source:** ESCWA elaboration using data from the 2017–2019 Demographic and Health Survey in Mauritania.

## 3. Mauritania

One of the most desertic and least densely populated countries in the Arab region, Mauritania is transitioning from a traditional pastoralist society to a society experiencing rapid urbanization. Poverty rates declined from 38.3 per cent in 2010 to 33.6 per cent in 2022,[202] mainly due to increases in agricultural productivity in rural areas, migration of part of the rural poor to Nouakchott,[203] and increases in mining exports and fisheries. However, most of the country still has inadequate access to basic infrastructure, limited education levels and low access to drinking water, sanitation and electricity. Chronic poverty remains mostly concentrated in rural areas and in the south of the country, especially in Guidimagha and Gorgol. Wealth inequality rates, while elevated, are lower than in many other countries in the region. In 2021, 57.8 per cent of the wealth of the country was controlled by the richest 10 per cent while the bottom 50 per cent owned 4.9 per cent.[204]

Despite certain improvements in poverty reduction, food security continues to be a serious concern. Undernourishment rates increased from 8.2 per cent in 2010 to 10.1 per cent in 2020, while food insecurity almost doubled in that period, rising from 26.3 per cent in 2010 to 45.3 per cent. Obesity levels have also been rising from 10.3 per cent in 2010 to 12.7 per cent in 2020, however, they are still lower than the Arab regional levels. A large part of the population is in need of humanitarian assistance.

There is limited agricultural activity in Mauritania, which is further diminished by recurrent droughts. Two thirds of the territory are classified as desert and are uninhabited, with only 0.5 per cent of the land being arable. Historically, pastoralism and livestock production contributed to the bulk of agricultural production, but the situation is changing with more frequent droughts and the settlement of traditionally nomadic or semi-nomadic pastoralist communities. In 2021, agriculture, forestry and fishing contributed to 18.6 per cent of GDP.[205] Given its limited productive capacities, Mauritania imports 60 per cent of the food staples it consumes.

### Unequal health outcomes

The 2019–2021 Demographic and Health Survey in Mauritania shows concerning levels of health problems associated with food insecurity among women and

children. Analysis reveals that wealth, education level and geographic location are correlated with specific health issues. It is estimated that over half of women suffer from iron deficiency while one in four children experience child stunting. There are big disparities in the incidence of health issues among different population groups. Rural areas, poorer households and less educated populations present higher rates of women's anaemia, child stunting and child wasting. Obesity is more prevalent among women with higher levels of wealth and education and among those living in urban areas.

Levels of women's anaemia are generally high throughout the country, affecting over half of women (56 per cent) of reproductive age, which is above the already high regional average (33.2 per cent in 2019).[206] There are considerable differences between the poorest quintile (68.9 per cent prevalence of anaemia) and the wealthiest (45 per cent prevalence of anaemia), and when comparing households living in Guidimagha (66.1 per cent) and Gorgol (65 per cent), some of the poorer regions of the country, with those residing in the wealthier regions such as areas of Tiris Zemour and Inchir (32.8 per cent). Similarly, anaemia rates are higher among women living in rural areas (61.4 per cent) compared to women living in urban areas (50.6 per cent).

The rates of child stunting in the country are high by international standards, affecting 25.8 per cent of children under 5 years of age, while child wasting rates are at a medium level of alert, with a prevalence of 6.4 per cent. Large disparities by level of wealth are evident, with poorer households presenting 34.8 per cent and 8 per cent child stunting and wasting rates, respectively, while wealthier households experience 14.5 per cent and 3.1 per cent. The disparities are particularly pronounced in relation to education level, with households without any formal education presenting over three times more prevalence of child stunting and over six times more child wasting than the most educated ones.

Obesity affects 26.9 per cent of women between 15 and 49 years of age in Mauritania. Wealthier households present much higher rates of women's obesity, with a prevalence of 41.6 per cent, while 13 per cent of women living in poverty are obese. Similarly, 34.1 per cent of women in urban areas suffer from obesity, compared to 19.5 per cent in rural areas. This phenomenon is observed in other LICs, where obesity is correlated with higher wealth and bigger cities but tends to switch to poorer populations and rural areas as countries develop. Consequently, specific government action should be taken promptly to promote healthy lifestyles and make nutritious food affordable and available to the population.

**Table 7.** Wealth quintile (Percentage)

| | Women's anaemia | Child stunting | Child wasting | Women's obesity | Overweight children |
|---|---|---|---|---|---|
| Lowest | 68.9 | 34.8 | 8 | 13 | 0.7 |
| Second | 60.9 | 28.3 | 7 | 18.6 | 0.9 |
| Middle | 55.3 | 24.3 | 6.7 | 24 | 1.7 |
| Fourth | 52.7 | 20.9 | 5.8 | 32.7 | 1.4 |
| Highest | 45 | 14.5 | 3.1 | 41.6 | 3.7 |

**Source:** ESCWA elaboration using data from the 2017–2019 Demographic and Health Survey in Mauritania.

## 4. Iraq

After three decades of instability following the 2003 invasion, Iraq has been working to rebuild the nation and improve living conditions. However, damaged infrastructure, high numbers of IDPs and high unemployment rates continue to pose challenges. Poverty rates increased from 26.7 per cent in 2010 to 32.1 per cent in 2022.[207] Wealth inequality is very high and has stayed stagnant in the last decade. In 2021, 72.1 per cent of the wealth was owned by the richest 10 per cent, while 1.6 per cent was held by the bottom 50 per cent. These levels are unchanged since 2010.[208]

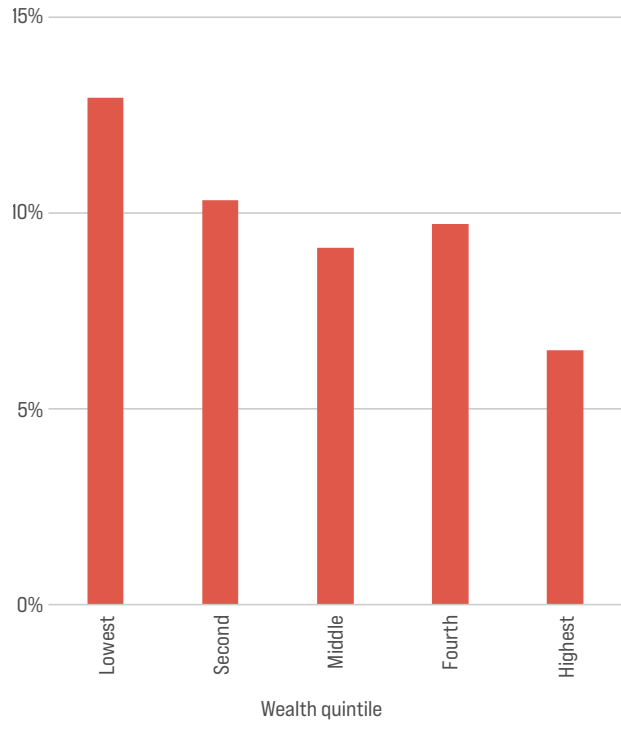
The high economic inequalities are reflected in food security levels. The country suffers from high levels of food insecurity and high levels of obesity, with trends showing that inequalities are intensifying. In 2020, undernourishment rates reached 15.9 per cent, up from 15 per cent in 2010.[209] Obesity rates increased from 26.9 per cent in 2010 to 30.4 per cent in 2016.[210] Women's anaemia is also highly prevalent, at 28.6 per cent in 2019, despite a decrease from 31.2 per cent in 2010.[211]

Agriculture, while representing only about 4 per cent of GDP in 2021,[212] is the second largest contributor to the economy after the oil sector and employs about 18 per cent of the labour force.[213] In 2018, Iraq produced 43 per cent of the wheat it consumed.[214] The country has, however, been experiencing diminishing rates of fertile soil in recent decades due to increasing soil salinity. In 2021, about 13 per cent of the land was suitable for agricultural production.[215] According to estimates from the Iraqi Ministry of Agriculture, targeted attacks following the Islamic State crisis led to the destruction of key infrastructure and to a 40 per cent decrease in agricultural production, which has yet to recover.[216]

### Inequalities in child nutritional outcomes

The latest Multiple Indicator Cluster Survey, conducted in 2018, sheds light on the prevalence of child nutritional deficiencies in Iraq and among different population groups. Child stunting and wasting rates are within the limits considered low by the WHO at 9.9 per cent and 2.5 per cent, respectively.[217] At the same time, 2.9 per cent of children display a weight too low for their age while 6.6 per cent are overweight. There are significant variations in these rates according to geographical location, mother's education level and household wealth.

**Figure 35.** Differences in the prevalence of child stunting by wealth quintile

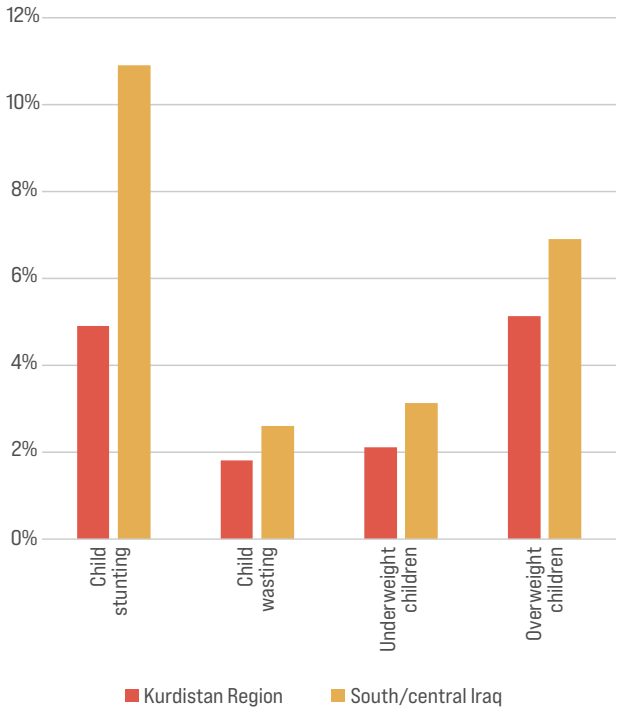



**Source:** ESCWA elaboration using data from the Multiple Indicator Cluster Survey, Iraq, 2018.

When comparing health indicators among urban and rural areas, child stunting and wasting prevalence are similar across all areas, but urban areas present higher rates of overweight children; 7 per cent of children living in urban areas are overweight compared to 5.9 per cent of children in rural areas.

Analysing child nutritional deficiencies by household wealth, higher rates of child stunting are observed among poorer families than among the rich. The lowest wealth quintile presents a prevalence of stunting of 12.9 per cent compared to 6.5 per cent in the highest

**Figure 36.** Prevalence of child nutrition-related health problems by geographical area




**Source:** ESCWA elaboration using data from the Multiple Indicator Cluster Survey, Iraq, 2018.

quintile. Children from mothers with no formal education suffer even higher rates of child stunting, at 14.4 per cent, compared to 6.9 per cent among those with upper secondary education. Child wasting and excessive weight, however, are not clearly associated with wealth or mother's education.

Political instability negatively affects the health of children. Geographically, south and central Iraq present higher levels of child stunting (10.9 per cent) and wasting (2.6 per cent) compared to the Kurdistan Region, with 4.9 per cent and 1.8 per cent, respectively. south and central Iraq suffer from higher levels of child obesity than the Kurdistan Region, with 6.9 per cent compared to 5.1 per cent. Tailored policies that promote a transition to healthier lifestyles are needed, together with comprehensive social protection policies.