



Inequality in the Arab region

Food insecurity fuels inequality



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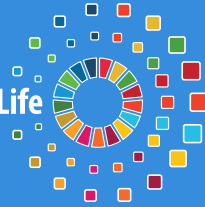
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Foreword

Food insecurity is a brutal face of inequality. It divides nations and breaks societies. Stories of hunger are millennia old, yet the narrative is growing increasingly complex under globalization, climate change, population growth and geopolitics.

In the Arab region, food insecurity is currently being aggravated by the impacts of the war in Ukraine and the global cost-of-living crisis, which is heavily affecting food prices. In some countries, conflict has destroyed the ability of farmers to produce food and has devastated the livelihoods of people so that they can no longer afford nutritious food. In other countries, economic crises have decimated livelihoods and the ability of national Governments to provide for their populations.

Hundreds of millions of families across the Arab region live in a vicious cycle of poverty and hunger. Families are making difficult decisions as to how to portion their food and what they can cut from their daily diet. Those facing overlapping inequalities are the most vulnerable to hunger. The threat of hunger increases the desperation of the already desperate, forcing them to take unprecedented risks. They may take dangerous jobs or sell their only assets just to feed their families, exacerbating the vicious cycle of poverty and hunger.

Children living in poverty in the Arab region are at risk of being left behind. Without access to sufficient nutritious food, they are unlikely to develop on par with more fortunate, well-nourished children. They are more likely to experience poor health and are less able to afford decent medical care. Their education and psychosocial development will never catch up with that of their peers. They will have fewer opportunities available to them as they grow up and will face life-long exclusion and compound inequalities.

Food insecurity transcends hunger. It affects sovereignty and stability. Globally and throughout history, well-fed populations have been those to flourish; however, when

populations are kept in poverty and denied access to food, social unrest, instability and violence follow.

The Arab region holds enormous wealth. We have enough food in the region to feed our populations. So why do we still face food insecurity?

The answer lies in inequality. The Arab region has the greatest income inequality in the world. It is also characterized by massively unequal access to nutritious, healthy food and the ability to afford it. One third of the region's population are hungry and another third of the population are obese.

The solution requires solidarity and redistribution. One nation alone cannot solve the problem. Arab leaders need to come together to increase food availability, access, utilization and stability. We must support our agricultural sector and workers, adopt innovative digital technologies and promote regional trade. We must focus on redistribution through progressive policies and comprehensive social protection systems. We must also respond to the dangers of climate change by reducing our emissions, adapting to new practices and enhancing disaster risk management.

We must act now to deliver practical policy solutions to feed our communities. It is unacceptable that anybody should face hunger, let alone starvation, when there are enough resources for all. Food security is a necessity, not an option. We must leave no one behind in our quest to feed the region.



Rola Dashti

Under-Secretary-General of the United Nations and Executive Secretary of the Economic and Social Commission for Western Asia (ESCWA)

Executive summary



The Arab region is the most unequal in the world, and inequality is increasing in various aspects. The effects of the COVID-19 pandemic, high interest rates and growing debt burdens in some countries, the ongoing cost-of-living crisis, and the impact of the war in Ukraine – which has disproportionately affected food and energy prices – are all contributing to widening inequality, both between and within countries.

Considering disparities between countries in the Arab region, oil producers are set to benefit from the current environment as Gulf Cooperation Council (GCC) countries gained as much as \$5.8 billion in 2022 as a direct result of the war in Ukraine. By contrast, middle-income Arab countries lost about \$6.7 billion due to higher food and energy prices, which would elevate their high public debt burdens and limit the financing available for basic public services. Already, regional public spending on health, education and social protection is below international benchmarks. Further strain on public service provision will accentuate inequality by limiting the possibility of access to basic public goods, which are much needed to provide opportunities and sustain a minimum standard of living for the most vulnerable and those living in poverty.

Concerning disparities within countries, wealthy Arab citizens are getting richer and more people in the region are becoming millionaires than ever before. In 2021, 20,000 individuals in the region newly became millionaires. At the same time, low-income Arab citizens lost one third of their wealth in 2021 and 120 million people across the region live in poverty. Gender inequality is also rife. Women in the Arab region earn on average less than a quarter of what men earn, due to societal norms and unequal legislation that limits their labour force participation and career growth. The

most gender-equal country in the region only ranks 68th in the global gender gap index, whilst three countries in the region sit in the bottom 10 of the index.

People across the region recognize that they live in a polarized society. A poll by ESCWA revealed that almost four-fifths of respondents believed that they lived in an unequal society, and more respondents considered that inequality would grow over the coming five years compared to those that believed it would decrease.

Inequalities in income and wealth are mirrored by inequalities in access to food.

Between countries, Arab least developed countries have five times higher food insecurity than those in the GCC, and much less access to clean water and sanitation, essentials for safe food consumption.

Within the countries of the region, 181 million people, close to 35 per cent of the Arab population, are food insecure; 12 million more than they were just one year ago. The majority of food insecure people also live in poverty. Not only are more people in the region hungry, the extent of their hunger is also more severe. There are 54 million people across the region facing severe food insecurity; an increase of 5 million over the last year. There is a real risk that famine will affect at least 460,000 people in Somalia and Yemen. Obesity rates across the region are also soaring: 29 per cent of the Arab population are obese, twice the global average.

Women are more likely to experience both undernutrition and obesity, both of which threaten the health and well-being of the population. Women of reproductive age are also more likely to face anaemia (estimated to affect one

third of women of reproductive age), which increases the likelihood of babies being born prematurely and of low birth weight, and reinforces the intergenerational pass-down of inequality.

Food insecurity is multifaceted. Climate change-induced floods and drought, economic crises and conflict and occupation all contribute to food insecurity in the Arab region and affect those living in poverty much more than the wealthy. The compound effect of these crises creates a more extreme impact than the individual sum of each crisis.

Limited food production in the region and massive food waste also contribute towards food insecurity. The Arab region produces less than half of the food it consumes, importing the remainder of its needs. There is enough food to feed everyone in the region, but food waste, combined with high import prices, causes millions to go without.

Still, poverty is the greatest determinant of food insecurity and whether a household can afford a safe and nutritious diet. The average Arab household spends one third of its income on food; poor households spend a much higher proportion, with their food choices being impacted by their monthly earnings.

This report analyses the four pillars of food security: access, availability, utilization and stability, from an inequality lens. It provides policy recommendations to address food security from the perspective of inequality.

It also calls for regional solidarity to redistribute resources from those that have plenty (Governments, corporations and individuals) to those that do not. A wealth solidarity fund can support regional redistribution, as can greater use of progressive fiscal policy to build comprehensive social protection systems. Social protection should not only protect against the immediate deprivations of poverty, but also provide assets, opportunities and skills so that beneficiaries can be permanently lifted out of poverty. Increased investments in health, education and social protection would support the impact of social protection systems. National nutrition strategies can reduce both undernutrition and obesity, and increase the public's awareness of healthy eating and exercise practices.

Finally, this report provides recommendations to make agricultural systems, and to some degree social protection systems, more shock resistant, in order to reduce the impacts of shocks on the most vulnerable. Early warning systems, disaster management units, and climate change mitigation and adaptation can also protect against the growing impacts of climate change. When shocks do occur, immediate humanitarian assistance, without political implications, is key to protecting the Arab population.

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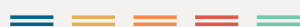


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Introduction



We are facing hunger on an unprecedented scale, food prices have never been higher, and millions of lives and livelihoods are hanging in the balance. The war in Ukraine is supercharging a three-dimensional crisis – food, energy and finance – with devastating impacts on the world’s most vulnerable people, countries and economies. All this comes at a time when developing countries are already struggling with cascading challenges not of their making – the COVID-19 pandemic, the climate crisis, and inadequate resources amidst persistent and growing inequalities.

 Source: United Nations Secretary-General António Guterres, Global Report on Food Crises, 2022

Uncertainty once again dominates multiple economic and social realities globally, and the Arab region is no exception.¹ The world is facing several compounded crises which are contributing to food insecurity: increasing inequalities in access to resources and opportunities; rising inflation; increasing food and fuel prices; global supply chain challenges; the impact of climate change; and the lack of strong, resilient local and regional supply networks. The combination of these factors has led to the worst

conditions witnessed in recent times and could threaten the stability and prosperity of nations around the world.

The record levels of high food and fuel prices have triggered a global crisis that is driving millions more into extreme poverty, magnifying hunger and malnutrition while threatening to erase hard-won gains in development. The war in Ukraine, supply chain disruptions and the continued economic fallout of the COVID-19 pandemic, along with

increased debt and high interest rates are reversing years of development gains and pushing inflation and notably food prices to all-time highs.

The complexity and force of these crises are evident in the Arab region and are shaping and driving inequalities given the already weak regional resilience regarding capacity to absorb shocks and the historically rooted inequalities.

This second edition of the Arab inequality report follows the same approach as the first edition, "Inequality in the Arab region – A ticking time bomb" (2022), which examined the challenge of youth unemployment in the region. The present report is also inspired by the Pathfinders Alliance for Action on Inequality and Division that seeks to identify practical and politically viable solutions to meet Sustainable Development Goal (SDG) 10 on reduced inequality. This report presents the latest findings on inequality in the Arab region so as to inform public policy design. It focuses on the combination of the perfect storm of the cost-of-living crisis, food insecurity and energy poverty as factors of inequality hitting the Arab region. It also examines the challenges facing food security in the region, taking into consideration the latest global and regional developments. It provides a practical set of actions that identify how opportunities can be shared more equally to reach the most vulnerable populations and reduce inequalities in food security.

The report has three main purposes. First, to provide an update on the multidimensional forms of inequality that were identified in the first edition of the inequality report, which are: wealth concentration and inequality; income poverty; income inequality; and gender inequality. Second, the report flags the issue of food security as a significant form of inequality that can threaten the region's security.

A vicious circle: food insecurity leads to inequality and inequality fuels food insecurity.

Third, the report discusses alternative policy solutions that could tangibly reduce inequality, particularly the pertinent challenge of food security in the region.

The report is based on a desktop review, in addition to a public online survey on food security in the Arab region. The survey was disseminated on social media platforms to solicit people's perceptions on food security in 2022. The purpose of the survey was to understand the perceptions and concerns of people in the Arab region in general and on food security in particular. The survey was not based on representative samples but on random responses from social media users, and as such results are indicative and cannot be generalized. Informative interviews were conducted with policymakers from the Arab region to complement the findings of the online survey. Case studies in four countries (Egypt, Iraq, Mauritania and the State of Palestine) were conducted using health and demographic surveys, as well as household expenditure and consumption surveys to analyse inequalities in food consumption patterns.

A perfect storm accentuating inequality

01



Key messages

01



COVID-19 exacerbated a difficult situation in the Arab region, and the war in Ukraine significantly worsened conditions.

02



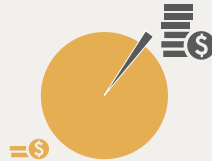
Around 120 million individuals are living in poverty in the Arab region.

03



With the exception of the Gulf Cooperation Council (GCC) countries, wealth inequality is increasing; the wealth share of the top 1 per cent rose while that of the bottom 50 per cent decreased.

04



There were 20,000 new millionaires in the Arab region in 2021. The average income of the top 1 per cent in the Arab region is 128 times higher than the average income of the bottom 50 per cent.

05



While the United Arab Emirates is ranked in the highest place in the Arab region in terms of closing the gender gap, it is in 68th place globally.

06



Women in the Arab region earn less than a quarter (23.9 per cent) of what men earn.

07



Public spending on health, education and social protection in Arab countries is lower than international benchmarks, making it harder for those living in poverty and the most vulnerable to access public services.

08



High debt, increasing interest rates and slow growth increase the debt burden on future generations and accentuate inequality in access to public services and economic opportunities.

09



The Arab region has experienced unequal gains and losses resulting from the war in Ukraine; the GCC gained \$5.8 billion as a result of the war, while middle-income countries (MICs) lost \$6.7 billion.

A perfect storm accentuating inequality

01



Let's have no illusions. We are in rough seas. A winter of global discontent is on the horizon. A cost-of-living crisis is raging. Trust is crumbling. Inequalities are exploding. Our planet is burning. People are hurting – with the most vulnerable suffering the most.

— United Nations Secretary-General António Guterres,
Address to the United Nations General Assembly, 2022

A. Global and regional developments

The Arab region has structural inequalities that are historically rooted; combined, they reinforce and exacerbate each other. For example, the region has had the highest rates of youth unemployment in the world for the past 25 years, standing at 23 per cent. The gender gap has been systematically above the global average. Climate change is a looming crisis, with the region already being the most water-scarce and most food-import dependent in the world.²

Economies in the Arab region are characterized by the prevalence of informal jobs and low-skilled employment. Productivity of labour is below the global average. There is underexploited regional cooperation in terms of

intraregional trade, connectivity, transport, scientific and technological development, and in educational and cultural systems.

Many Arab countries are caught in conflict or affected by its repercussions, which has reversed development gains and severely damaged or destroyed industries, productive capacities and vital infrastructure. Long-standing conflict in the region has affected government expenditure, reduced available national resources for social expenditure, and slowed efforts to reduce structural inequalities.

The complexity, overlap and scale of the crises that the region is facing have worsened their impact and minimized

any progress that the social and economic policies in place can make to reduce existing inequality. This has been coupled with a possible reduction and diversion of official development assistance (ODA) to the Arab region due to the war in Ukraine and the shift in priorities.³

Long-standing conflict in the Sudan has destroyed infrastructure and reduced productivity. It has diminished the country's ability to invest in new projects, create jobs and increase people's incomes.

Source: Jamal Al-Nil, Deputy Minister of Social Development, the Sudan

Global and regional developments that are impacting conditions are discussed in this section. These developments include: the war in Ukraine; the cost-of-living crisis; increased debts; and exchange rates and terms of trade.

1. The war in Ukraine: compounding crises

The war in Ukraine has worsened an already difficult situation in the Arab region. The economic effects of the war vary from one country to another depending on each country's financial situation, debt level and import dependence, with a devastating overall effect on the entire region. The war in Ukraine has affected economic growth, which decreased from 4.9 per cent to 4.4 per cent worldwide. Coupled with high inflation rates, this is resulting in recession and causing stagflation in 2023.

As an immediate effect of the war in Ukraine, there has been a steep increase in oil and gas prices worldwide, including in the Arab region. The United Nations Economic and Social Commission for Western Asia (ESCWA) built three scenarios to assess the impacts of the war: a baseline assuming that the war had never broken out and the average price of a barrel of oil remained at \$70; a short-term conflict ending in June 2022

with an average oil price of \$100 per barrel; and a long-term conflict with an average oil price of \$170 per barrel. According to these growth estimates, gross domestic product (GDP) in the Arab region was expected to grow by 5.18 per cent in 2022 in the short-term conflict scenario (0.02 percentage points lower than the pre-war projections), and by 4.78 per cent in the long-term conflict scenario (0.42 percentage points lower than the pre-war projections – an estimated loss of around \$11 billion). Predictably, there are significant variations between the growth paths of the GCC countries and other countries in the region.

As significant oil exporters, the GCC economies benefited from the recovery in oil markets that started in 2021 and grew at their fastest paces since 2014. These countries made significant profits from the oil price hikes caused by the war in Ukraine. Even though these increases turned out to be temporary, it is estimated that the subregion gained around \$5.8 billion, mainly from higher oil revenues, in 2022.⁴ Concurrently, it is estimated that GDP growth in MICs fell by 0.8 GDP percentage points in 2022 (an estimated loss of \$6.7 billion). With the exception of Algeria, a producer and exporter of oil and gas, all Arab MICs experienced losses in growth.

The economies of Arab least developed countries (LDCs), which include Mauritania, Somalia, the Sudan and Yemen, are expected to grow by 1.03 per cent in the long-conflict scenario – an estimated loss of \$600 million. The growth rate for the Sudan, for example, will be 0.49 per cent in the long-term scenario (0.68 percentage points lower than the pre-crisis scenario). In addition, this group of countries is at risk of receiving less ODA, as more aid is directed to support Ukraine and countries hosting Ukrainian refugees.⁵

The fact that some Arab countries, especially in the GCC, are witnessing an economic boom due to higher oil prices, while others are witnessing negative economic growth and potential reductions in ODA is expected to increase inequality among Arab countries.

Inequality will also be widened at the national levels as individuals, especially the most vulnerable such as women, persons with disabilities, older persons and migrants will face difficulties in meeting their basic needs of food, education and health due to a contraction in fiscal space.

2. The greatest cost-of-living crisis in a generation

The main transmission channels generating the cost-of-living crisis include: rising food prices, rising fuel and gas prices, rising interest rates and tightening financial conditions. Each of these elements have important effects of their own; taken together, they can also reinforce each other, creating vicious circles. This phenomenon had already started due to the COVID-19 pandemic and the war in Ukraine. As the cost of living increases, workers are looking for new jobs where their wages rise with inflation; and pay increases may entrench inflation.

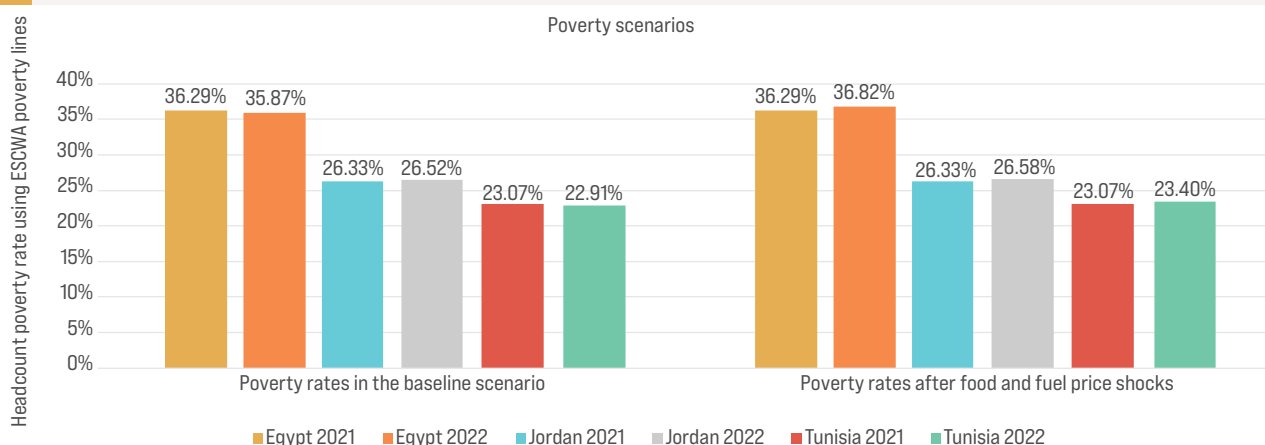
High fuel and fertilizer prices increase farmers' production costs as well as transport and distribution costs, which results in higher food prices. This can squeeze household finances, raise poverty and erode living standards. Higher prices increase pressure to raise interest rates, which increases the cost of borrowing and may eventually result in currency devaluations, thus making food and energy imports even more expensive, continuing the vicious circle. These dynamics have dramatic implications for inequality among people living in the same country as well as between countries.⁶

The cost-of-living crisis is resulting in more households struggling to make ends meet. It is most difficult for those households in the bottom 20 per cent of the income distribution. Rural households, single-person households, female-headed households and renters endure the sharp end of soaring living costs.

The increase in food and fuel prices, for example, has led to a disproportionate increase in the number of people living in poverty in Arab countries. According to ESCWA projections of growth in Egypt, Jordan and Tunisia, the Ukraine war has resulted in rising costs of living due to the complex situation in the energy and commodity markets, resulting in an estimated 15 per cent increase in food prices and 25 per cent increase in fuel prices in 2022.⁷

Consequently, poverty reduction in these three countries has slowed. Using ESCWA poverty lines, Egypt, Jordan and Tunisia witnessed an increase in poverty in 2022 compared with previous years, especially in comparison to the years prior to the COVID-19 pandemic. More than one third of the population of Egypt (36.8 per cent) were living below ESCWA poverty lines in 2022. In Jordan and Tunisia, the corresponding poverty rates in 2022 were 26.6 per cent and 23.4 per cent, respectively. Under projections made prior to the start of the war in Ukraine, 35.9 per cent, 26.5 per cent and 22.9 per cent of the population in Egypt, Jordan and Tunisia were expected to be living in poverty in 2022, respectively. This would have constituted 1.07 million additional people living in poverty in the three countries in 2022. However, given the food and fuel price shocks since the war, the additional numbers of people living in poverty are 1,009,000 in Egypt; 7,000 in Jordan; and 50,000 in Tunisia (figure 1).

Figure 1. Poverty headcount ratios using ESCWA poverty lines in Egypt, Jordan and Tunisia, 2021–2022



Source: Economic and Social Commission for Western Asia (ESCWA) projections. For more information on the forecasting methodology, see ESCWA (2022a). Available at <https://www.unescwa.org/publications/obstructed-poverty-reduction-growth-passthrough-analysis>.

Note: For Jordan, the poverty rate was computed using ESCWA poverty lines. See ESCWA (2022b). Available at <https://www.unescwa.org/publications/counting-world-poor-engel-law#:~:text=The%20present%20paper%20proposes%20a,modelled%20by%20classical%20economic%20theory>.

The increase in prices, accompanied by distortions in global supply chains and a drop in economic activity has had other implications, including on food security. Increasing fuel prices also affect inequality through regressive public subsidies for fossil fuels in the region. Alternatively, social protection programmes, such as universal child benefits, could reduce burdens on public budgets, diminish inequality and combat climate change and environmental degradation, which were linked to increasing food insecurity the first quarter of 2022. The United Nations Food and Agriculture Organization (FAO) Food Price Index (FPI) skyrocketed to unprecedented levels in real and nominal terms, recording 156.3 for the first time since the financial crisis of 2007–2008 (figure 2). Such unprecedented spikes in food prices are adding to inflationary pressures post COVID-19, leaving low- and middle-income countries struggling to sustain the purchasing power of those living in poverty and the vulnerable. The combined situation of COVID-19 and the war in Ukraine pushed inflation to reach 14.8 per cent in the Arab region, excluding GCC countries, 60 per cent of which is attributed to surging food prices.⁸ A significant number of Arab countries are extensively reliant on the Russian

Federation and Ukraine to satisfy their cereal demand, particularly wheat, which makes them more vulnerable to shocks. Figure 3 shows the wheat import dependency of Arab countries on the wheat stocks of the Russian Federation and Ukraine. It reveals that Egypt, Lebanon and Somalia are heavily reliant on wheat imports from the two war-affected countries with alarming figures that raise concern about inflation and food insecurity in the upcoming period.

The ramifications of the multiple crises not only hurt those living in poverty and the vulnerable, but also the middle class as its members have started to encounter the adverse effects of the rising costs of living and loss of purchasing power. Food expenses represent the largest share of the middle-class total spending, particularly for the lower middle class. While wage levels remain rigid to price changes, the middle class can barely cover their non-food expenses as they allocate the bulk of their income to meeting their basic food needs. This squeezes their spending ability on expenditures such as education and health, which are also affected by inflation spikes due to the rise in energy prices.

Figure 2. The Food and Agriculture Organization Food Price Index, 2007–2022

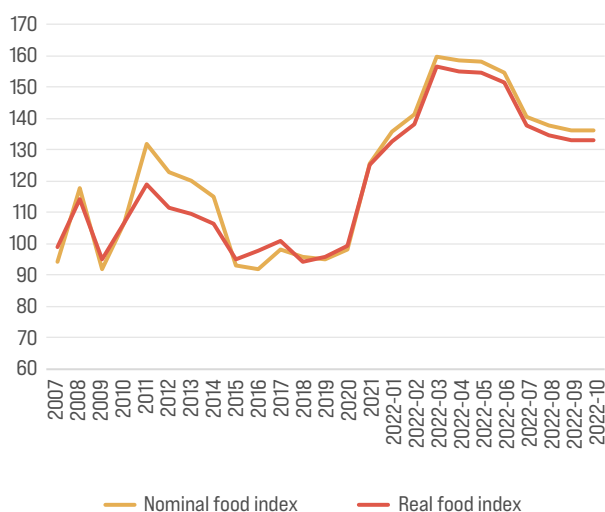
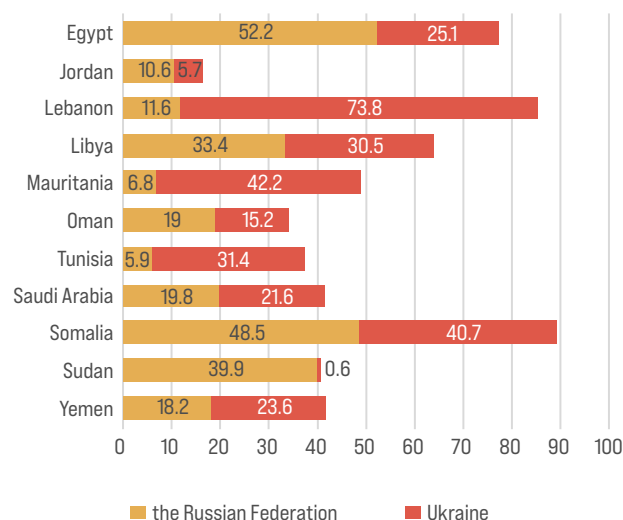


Figure 3. Share of wheat imports from the Russian Federation and Ukraine out of total wheat purchases in 2021 (Percentage)



Source: ESCWA calculations based on the Food and Agriculture Organization (FAO) FPI data, and Schmidhuber and others (2022) using the Trade Data Monitor data.

Surging Energy Prices and Energy Poverty

Global fossil fuel prices started rising in 2021 as global demand recovered after the COVID-19 pandemic, while supply remained tight following years of subdued investment in the energy sector. In relation to the war in Ukraine, prices soared to historically high levels in early 2022, especially for natural gas, given the disruptions to trade in energy commodities and concerns over future supply. The Russian Federation has a large global footprint in natural gas, crude oil and coal markets, accounting for about 20 per cent, 10 per cent and 5 per cent of global exports of those commodities, respectively. By the end of the first quarter of 2022, crude oil prices had doubled, coal prices tripled and natural gas prices increased more than five-fold relative to early 2021. About half of the increase in crude oil and coal prices is expected to last through 2026, while for natural gas, about a quarter of the increase is expected to persist through 2026.

Energy poverty is an equality issue. A household is defined as being energy-poor if they spend more than 10 per cent of their disposable income on energy services, leaving little for other expenses. Energy poverty rates are rising across the Arab region, reflecting the significant increase in energy prices globally.

There is a strong income gradient in terms of the impact of energy price increases. Recent increases in energy costs (including motor fuels) led to a much higher percentage of after-tax and transfer income for the lowest-income fifth of households compared to the highest-income fifth. This is because a larger share of lower-income households' spending is on energy, which is used for cooking, heating and electricity.

Poorer households spend more of their overall income on energy, while higher-income households may be able to more easily absorb the hikes in energy costs. As fuel bills go up, those people with lower incomes, including older persons and rural households, are hardest hit and suffer the most due to their expenditure patterns. In the face of rapidly increasing numbers, households are having to choose between putting food on the table or buying back-to-school clothes. In many countries, over half of parents have cut down spending on household and medical bills, loan repayments, clothes, hobbies and transport in order to be able to afford food. People have been forced to choose between using electricity and feeding their families. Many are skipping meals most weeks to feed the children in their care.

The increased cost of living is associated with inflation, which is also heightened due to the war in Ukraine and is expected to increase to 11 per cent if the conflict continues long-term. Some Arab countries will feature very high inflation rates due to ongoing political instability. Lebanon and the Sudan, for example, are expected to have inflation rates of around 112.2 per cent and 133.8 per cent, respectively, in the long-term scenario.⁹

Due to inflation, the prices of commodities are rising, and hence producers are resorting to shrinking the weight of packaged items while maintaining the same prices. This phenomenon, referred to as "shrinkflation", is done to avoid negative reactions from consumers who keep track of price changes but not of weight decreases. Shrinkflation is now rampant, with cost increases taking place across the board. Bread, cereals, drinks,

snacks, cleaning, and paper products are most affected by shrinkflation. The effect of shrinkflation is that households pay more for basic necessities, since they pay the same prices for lesser amounts of products.

3. Increased debt: adversely impacting public spending

With inflation rapidly climbing to multi-decade highs and price pressures broadening globally across many economic sectors, central banks have recognized the need to urgently address inflationary expectations to avoid further disruptive adjustments later. Central banks have increased interest rates markedly in an attempt to push down inflation. The monetary policy cycle is now increasingly synchronized around the world. Importantly, the pace of tightening is accelerating in several countries, in terms of both frequency and magnitude of rate hikes. Stable prices are a crucial prerequisite for sustained economic growth. With risks to the inflation outlook tilted to the upside, central banks are working to prevent inflationary pressures from becoming entrenched. Higher real interest rates have resulted in even larger increases in borrowing costs for consumers and businesses and have contributed to sharp drops in equity prices globally. As of early 2023, rate raises in most countries have not matched the pace of inflation. The risk is that raising interest rates too high can choke off economic recovery.

Debt finance is an important resource for financing sustainable development. However, the efficiency and effectiveness of debt finance depend on key factors, such as the prudent usage of debt and credible fiscal frameworks for the effective management of debt. When borrowing is coupled with asset accumulation that increases the country's net worth and productive potential, it creates growth and generates revenues that can foster inclusive development. When it finances consumption spending, without increased earnings potential, it adversely affects economic growth and collection of revenues. In such cases, the fulfilment of debt service obligations can be undertaken at the expense of financing public services, thus hindering the financing of social well-being and contributing to increased inequality within and across countries. These linkages stand true for the Arab region.

The average annual growth of public debt in the Arab region has steeply increased over the past decade and remained higher than the growth rate of GDP¹⁰ until 2020 (figure 4). The stronger performance of the GCC subregion influenced the decline in debt growth in 2021. However, public debt in the region increased from \$1.4 trillion in 2020 to \$1.5 trillion in 2021, which is 58 per cent of the Arab regional GDP.¹¹ Most LDCs in the region remain in debt distress or at high risk of debt distress.¹² MICs¹³ accounted for about half of the region's total public debt in 2021, averaging 86 per cent of their GDP. With increasing public debt, the profile of external public debt has been changing in the MICs with more borrowing from private creditors, while the share of concessional borrowing from official creditors is declining.¹⁴ Consequently, the external debt service burden of MICs is increasing, reaching \$27.7 billion in 2021, which is on average 14 per cent of their revenues (figure 5). It varies across countries. For instance, in 2021, Tunisia spent around 30 per cent of its revenues on external debt services; Egypt and Jordan spent around 21 per cent; and Morocco spent more than 10 per cent of its revenues on external debt services. This high debt service burden poses additional liquidity challenges and strains fiscal space, which could have otherwise been invested in essential public services. In addition, in the countries with available data, spending is oriented towards recurrent expenditures dominated by a high public sector wage bill and public transfers. Such recurrent expenditures limit the space available for public investment, including in social sectors.¹⁵

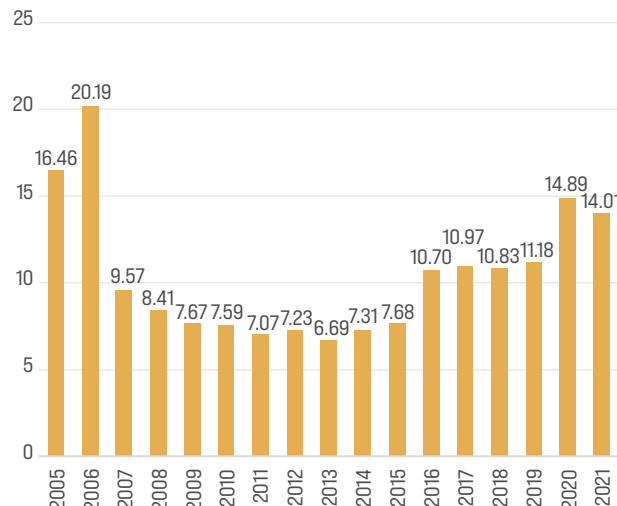
Inadequate financing for essential social services has made it harder for those living in poverty and the most vulnerable in the region to access public services, which accentuates inequality within the country. High and persistent fiscal deficits, such as those noted in low- and middle-income Arab countries, drive debt accumulation and liquidity challenges that constrain social and economic investments. For instance, public spending on health, education and social protection in Arab countries is lower than the established international benchmarks. Higher out-of-pocket spending, an issue across the Arab region, is associated with higher rates of maternal mortality. Countries with lower social service access and less effective protection for those living in poverty, especially those experiencing conflict or fragility, experience multiple deprivations.¹⁶

Figure 4. Gross domestic product growth vs growth of public debt in the Arab region



Source: ESCWA calculations, based on data from the International Monetary Fund (IMF).

Figure 5. External debt service of Middle-income countries in the Arab region (Percentage of revenues)



Source: ESCWA calculations, based on data from the World Bank International Debt Statistics and the IMF.

Constrained fiscal space and liquidity challenges are apparent in the Arab region's inability to respond to the pandemic fallout, which adversely affected the ability of countries to recover equally and at the same pace. This widened the gap between the Arab region as a whole and the global sphere. Fiscal stimulus in the Arab region was low compared with the global average and given the needs arising from dramatic losses in income and jobs and strict pandemic containment measures (figure 9). Arab countries allocated around 4 per cent of GDP for fiscal stimulus in 2020, compared with a global average of 22 per cent.¹⁷ There were also wide variations in fiscal stimuli between countries within the region. The result was the slow and moderate recovery of economies in 2021, compared to those developed countries with a fiscal strategy capable of mitigating the impacts of the pandemic.

High debt burdens, rising interest rates, sluggish growth and inefficient debt management have not only increased the current debt service burden, but also overloaded future generations and accentuated inequality in public services and economic opportunities over time. Inefficiencies deprive citizens of the potential benefits of debt financing, especially when debts are used to grow sectors with a focus on improving equity and social

well-being. Inefficient debt management poses obstacles to enhancing economic opportunities, the prospects of citizens and the realization of their human rights.¹⁸

4. Exchange rates and terms of trade

The surge of international prices has put pressure on the international reserves of food-importing countries and consequently their exchange rates. The Arab region, as a net food importer, has been severely hit by global food price increases. In addition, there have been devaluations in the Egyptian pound, the Lebanese pound, the Moroccan dirham and the Tunisian dinar. Currency depreciations reduce the purchasing power of individuals and put additional pressure on State budgets.

The surging value of the dollar has broad implications for the global economy, devaluing currencies in other countries. A strong dollar pushes import prices up, which can add to inflation. The value of the dollar is also consequential for emerging economies since it puts these countries at greater risk of defaulting on their debts.

Dollarization

Facing rapid declines and severe fluctuations in local currencies, food markets and food businesses that import food commodities, foodstuffs and food ingredients internationally in strong currencies, such as the dollar, are converting their final retail prices into dollars also. This increases food price inflation and locks local prices into global currency movements. Changes in the value of the dollar impact local retail food prices in the Arab region. For local populations, those who have access to dollars through working for multinational corporations or international conglomerates, or those in receipt of overseas remittances are relatively buffered from local currency fluctuations.

Food price subsidies in some countries act as a shock absorber in reducing the impact of international currency fluctuations on consumers. However, the ability of these Arab countries to withstand international currency fluctuations is being tested by pressures on fiscal spaces and the scale of the local currency depreciations.

The dollarization of food prices in food wholesale and retail markets, and in food businesses and restaurants further increases food insecurity for lower-income households, those living in poverty and vulnerable populations relying on charity, social assistance payments, overseas remittances, or minimal wage employment in the informal sector, and that are paid in depreciating local currencies. Dollarization increases inequalities.

As currencies devalue, their terms of trade deteriorate, with the price of imports surging relative to exports. In such cases, some Arab countries may incentivise

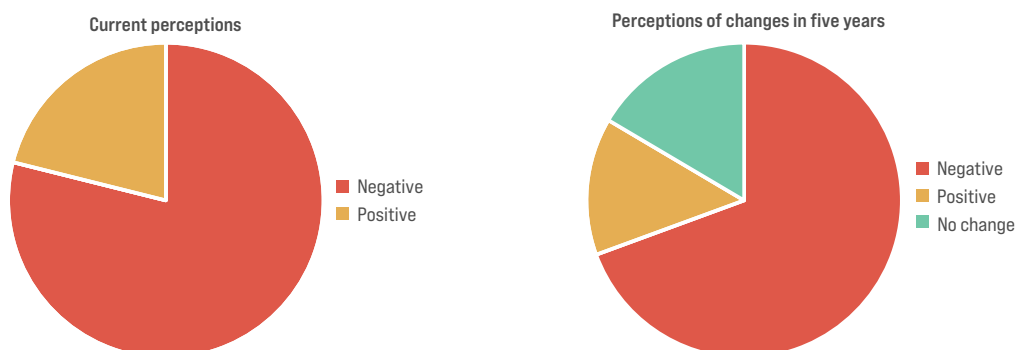
domestic grain production, while others may turn to new trading partners to replenish food stockpiles.

B. An overview on inequality in the Arab region

People's perceptions of social and economic inequality in the Arab region show a negative outlook. As shown in figure 6, people are largely negative about their current and future situations. Only 21 per cent of respondents believe that they currently experience some or full equality, and only 14 per cent believe that inequality will improve in the next five years. Concerningly, of the 69 per cent who believe that society will become more unequal over the coming five years, the majority believe that there will be a large increase in inequality.

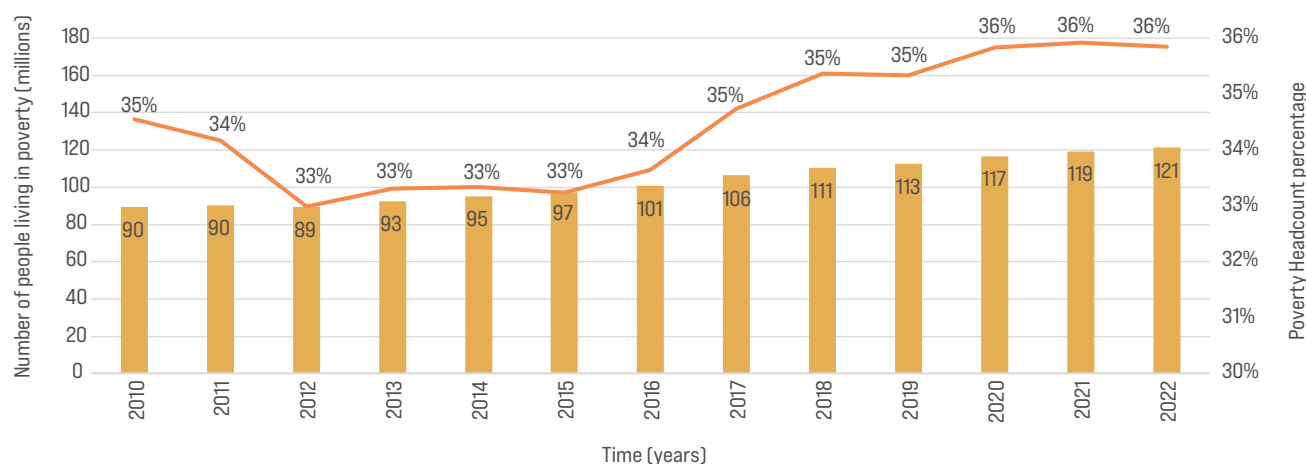
The public perception of inequality matches the views of the ESCWA Group of Experts on Social Protection Reform, who believe that inequality exists on a large scale in the Arab region and is perpetuated by discriminatory laws. They consider that there is no equal access to public services nor social protection coverage for all. Several groups are at higher risk due to their vulnerability (extreme poverty, disability, rural/periphery residents).

Figure 6. People’s perceptions of social and economic inequality



Source: Results of ESCWA online opinion poll.

Figure 7. Poverty trends using ESCWA poverty lines for selected Arab countries, 2010–2022



Source: ESCWA projections and poverty lines. For more information on the forecasting methodology, see ESCWA (2022a). Available at <https://www.unescwa.org/publications/obstructed-poverty-reduction-growth-passthrough-analysis>; and ESCWA (2022b). Available at <https://www.unescwa.org/publications/counting-world-poor-engel-law#:~:text=The%20present%20paper%20proposes%20a,modelled%20by%20classical%20economic%20theory>.

Note: The countries included are Algeria, the Comoros, Djibouti, Egypt, Iraq, Jordan, Mauritania, Morocco, the State of Palestine, Somalia, the Sudan and Tunisia.

The following section provides updates on some forms of inequalities evident in the Arab region¹⁹ that were highlighted in the first edition of the inequality report, “Inequality in the Arab Region: a ticking time bomb”.²⁰

1. Income poverty

Since 2010, income poverty²¹ has been on the rise, erasing poverty reduction gains made in previous decades. Poverty reached an average of 36 per cent in the region

(excluding GCC countries) in 2022 (equivalent to 121 million people living in poverty). The Arab region is the only region worldwide with increasing poverty rates over the past decade. The problem of rising income poverty has been particularly severe in Arab conflict-affected countries. As shown in figure 7, there was a hike in the number of people living in poverty in the Arab region between 2019 and 2022, mainly due to the COVID-19 pandemic, the Ukraine crisis, and the impact of rising food and fuel prices in oil-importing countries, which

host the vast majority of the populations living in poverty. It is important to note that figure 7 does not include Lebanon, Libya, the Syrian Arab Republic or Yemen due to data limitations. Poverty is expected to have increased significantly in these countries since 2010 due to conflict and political instability.

The rise of poverty in Arab countries is the result of stagnating inequality and falling real household income per capita in many countries over the period 2010–2022. In contrast, globally the average income increased, explaining why poverty has risen in Arab countries while it has declined globally.

2. Wealth inequality

According to the most recent estimates of regional wealth distribution as of end of 2021, the stock of personal wealth in the Arab region – when measured in nominal dollar terms – has appreciated since pre-pandemic times.²² At the same time, the distribution has become more unequal, as many of those at the top of the wealth distribution benefited the most from this upwards global financial trend, while those at the bottom who carried the burden of the upheavals and the rising cost of living, saw their assets depreciate, and were often forced to use their savings.

Before 2009, the average wealth of persons in the Arab region was growing at a fast pace of around 11.5 per cent per year. After 2009, the wealth of GCC residents, like that of residents worldwide, continued growing. For residents in Arab middle-income, low-income and conflict-affected countries, there were no clear trends as the wealth of individuals fluctuated starting 2009, showing either stagnation or a slight decline. At the end of 2017, residents of Arab MICs had only a slightly higher level of wealth holdings compared to 2012 (\$14,200 in 2017 compared with \$14,000 in 2012), while residents of Arab conflict-affected countries were poorer (\$8,900 in 2017 compared with \$9,200 in 2012). LDCs suffered as a group because of a longer-term contraction in the Comoros and Mauritania and a social crisis in 2018 in the Sudan. In the year leading up to the COVID-19 pandemic, the average wealth in all Arab subregions had begun increasing owing to rising valuations in the commodities and securities markets. In the first year of the pandemic, between the end of 2019 and the end of 2020, Arab nationals' wealth declined, notably in the GCC subregion and in conflict-affected countries. Average wealth dipped by 14 per cent in Arab conflict-affected countries; 7.5 per cent in GCC countries; and 2 per cent region-wide. In the second year of the pandemic, wealth levels exceeded their pre-pandemic levels in all subregions except for conflict-affected countries, which recovered just one-half of their year-2020 losses.

Figure 8. Average personal wealth worldwide, December 2000–December 2021

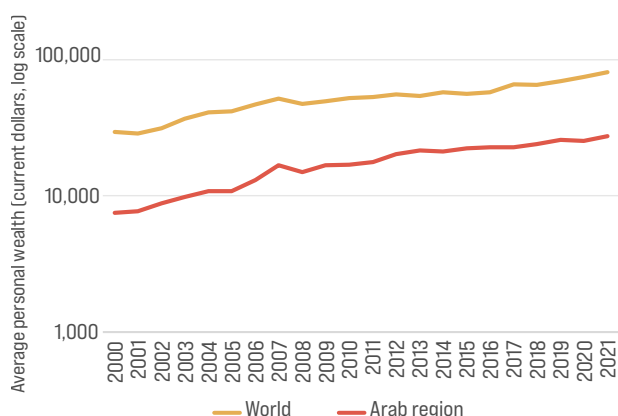
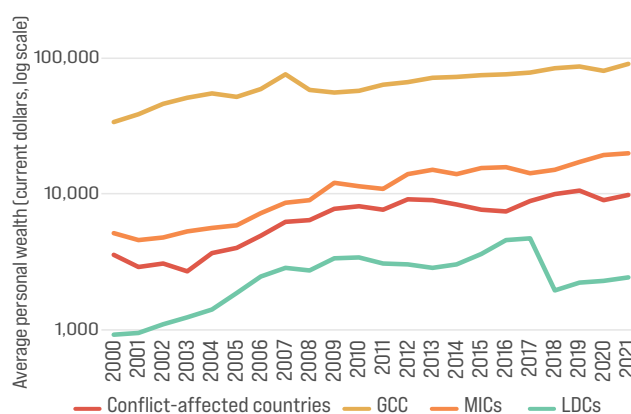


Figure 9. Average personal wealth in the Arab region, December 2000–December 2021



Source: ESCWA estimates based on data from the Credit Suisse 2022 Global Wealth Databook.

The snowball effect of global wealth concentration

Wealth concentration has serious implications on stopping climate breakdown, since the richest are those emitting huge amounts of carbon. Oxfam estimated that the richest 1 per cent (63 million billionaires) alone were responsible for 15 per cent of cumulative emissions. This is almost twice the amount of emissions of the whole of the bottom half of the global population. The 125 richest billionaires had total carbon emissions of 393 million tonnes, which is about the same as the size of France.

Carbon emissions not only affect climate change, but also farming and the future of food security.

Source: Oxfam, Carbon Billionaires: the investment emissions of the world's richest people, 2022.

Figure 10. Share of aggregate wealth of the wealthiest 1 per cent worldwide, December 2000–December 2021

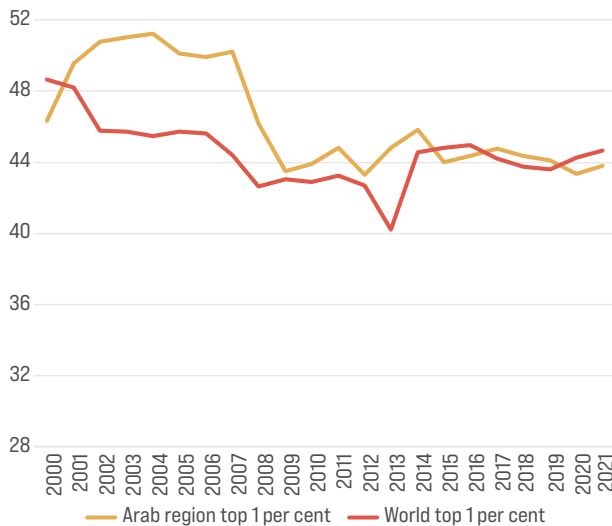
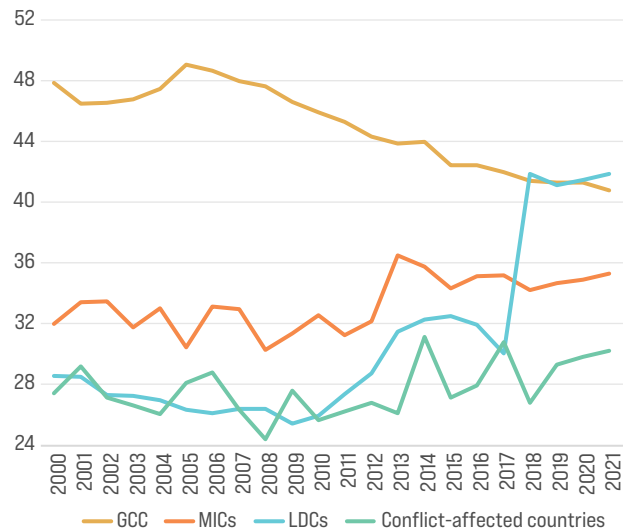


Figure 11. Share of aggregate wealth of the wealthiest 1 per cent in the Arab subregions, December 2000–December 2021



Source: ESCWA estimates based on data from the Credit Suisse 2022 Global Wealth Databook.

Figure 10 compares the wealth of the richest 1 per cent of people worldwide with the richest 1 per cent in the Arab region; figure 11 compares the richest 1 per cent across the Arab subregions. The figures show that the disparity in wealth across countries' residents has also increased since the COVID-19 outbreak in all Arab subregions except for the GCC.

During the period 2019–2021, polarizations increased between those who hold \$1,000,000 and those holding \$10,000 or less. In this period, about 70,000 individuals are estimated to have broken through the \$1,000,000 wealth mark (totalling 500,000 people at the end of 2019, dipping to 490,000 people in 2020, and increasing to 570,000 people in 2021). At the same time, the group

holding less than \$10,000 of lifetime savings has also slightly increased from 167 million individuals in 2019 to 170 million people at the end of 2021.

Trends in wealth inequality and concentration are also evident among the bottom 50 per cent of the population, as shown in figure 12. The share of this group increased in the GCC countries in the period 2000–2022 and fluctuated among other subregions, showing either stagnation or a decline.

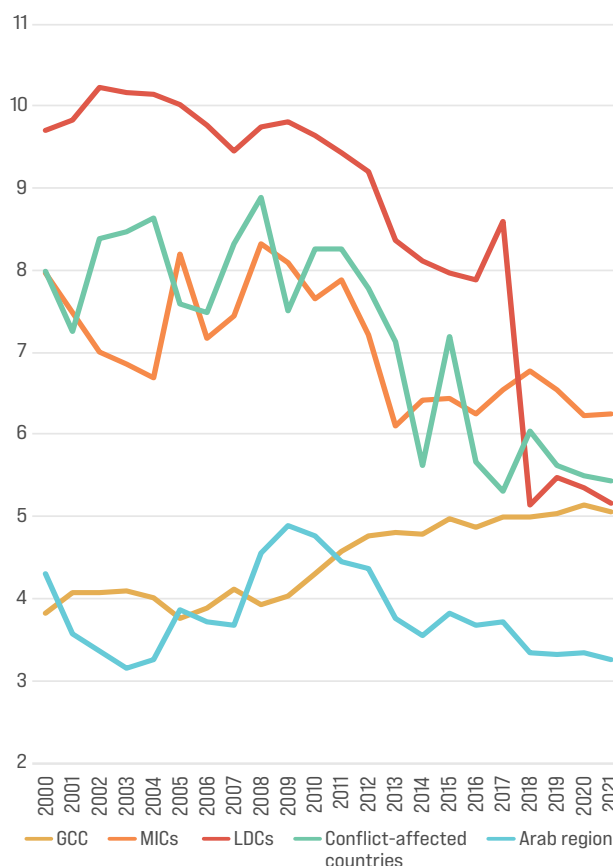
3. Income inequality

The Arab region continues to record the highest levels of income inequality globally, with notable variations among its countries. There are significant variations both within countries and between countries in terms of inequalities in the Arab region, ranging from Qatar, which has among the highest GDPs per capita in the world, to Yemen, which is among the world's poorest countries. The region is home to countries with the highest income per capita globally, as well as those with the lowest per capita income. For example, Qatar has the highest household income per capita worldwide and is the second most equal country globally according to the Gini index that compares 183 countries.²³ On the other hand, Saudi Arabia, the Comoros and Bahrain, rank among the most unequal countries globally standing at 148th, 146th, and 134th, respectively.²⁴

In the Arab region, the poorest 50 per cent of the population holds only 9 per cent of the region's total income, while the richest 1 per cent monopolizes 23 per cent of the region's total income. In effect, the average income of the top 1 per cent in the Arab region is 128 times higher than the average income of the bottom 50 per cent.²⁵ This represents a big difference compared to other regions of the world, where the gap between the poorest 50 per cent and richest 1 per cent is narrower. In Europe, for example, the poorest 50 per cent accrue almost 19 per cent of the region's income, which by far surpasses the 12 per cent share of the richest 1 per cent. In East Asia, the bottom 50 per cent and the top 1 per cent claim 14 per cent and 15 per cent of the total income, respectively (figure 13).

Between 1980 and 2021, the income share of the top 1 per cent of the population in the Arab region dropped

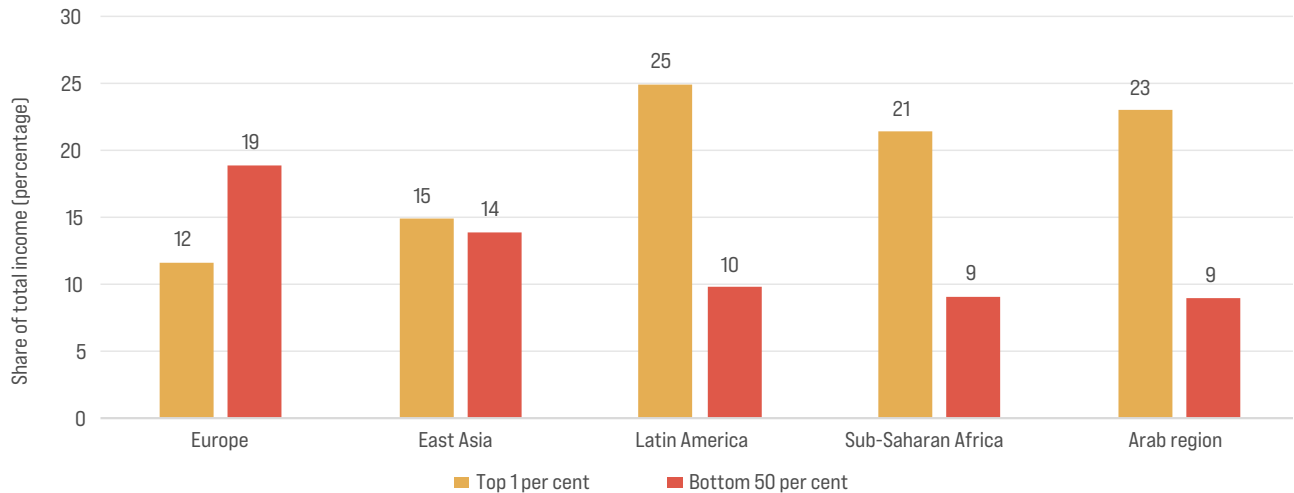
Figure 12. Share of aggregate wealth of the poorest 50 per cent, December 2000–December 2021



Source: ESCWA estimates based on data from the Credit Suisse 2022 Global Wealth Databook.

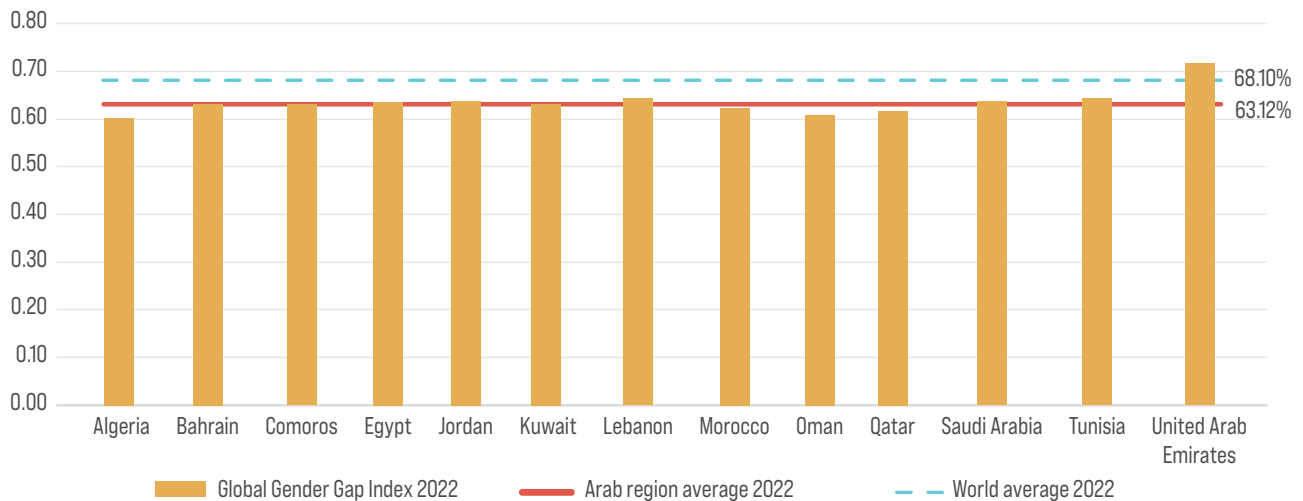
slightly. However, this reduction was not linear. In 1990, the top 1 per cent of the population held 27 per cent of the national income, compared with 33 per cent in 1980, showing a six percentage-point reduction over 10 years. Subsequently, the income share of the top 1 per cent was stagnant at 27 per cent for eight years (1992–2000). It then started to slightly decrease from 27 per cent in 2000 to 23 per cent in 2021. However, this four percentage-point reduction over 21 years did not benefit the poorest 50 per cent of the population, whose income share fluctuated between 9 per cent and 10 per cent during the period 2000–2021. The drop in the share of income of the top 1 per cent benefited the middle 40 per cent of the population, whose share of national income increased from 31 per cent in 2000 to 34 per cent in 2021.

Figure 13. Income distribution by region, 2021



Source: ESCWA calculations based on data from the World Inequality Database.

Figure 14. Gender Gap Index closed to date in the Arab region, 2022



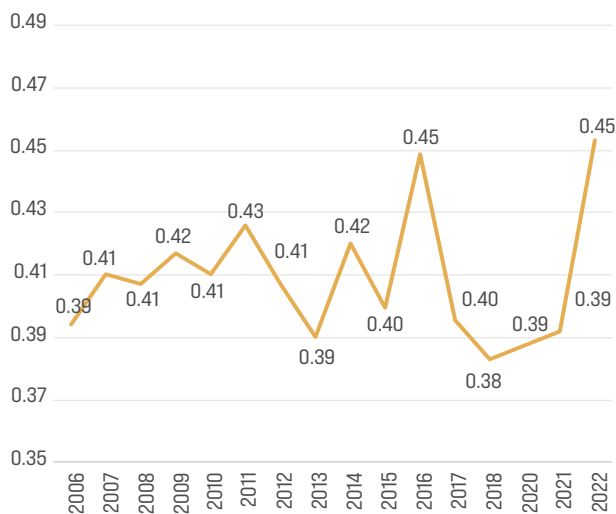
Source: ESCWA calculations based on the World Economic Forum, Global Gender Gap Reports, 2022.

4. Gender inequality

The Arab region has a persistent gender gap. It was at 37 per cent in 2022, compared to 39 per cent in 2021. Despite this slight progress, the Arab region continues to hold the second-largest gender gap worldwide. Across the 13 Arab countries covered in the 2022 Gender Gap Index,²⁶ the United Arab Emirates is noticeably

further ahead, with a gap of 28.4 per cent, placing it as the highest ranking in the Arab region, yet only 68th globally. Meanwhile, Algeria, Oman and Qatar are among the countries trailing behind. The countries that showed the most significant improvement in the region in 2022, relative to 2021, were Kuwait, Morocco and Saudi Arabia.

Figure 15. Regional trends in closed gender gap in the Economic Participation and Opportunity subindex



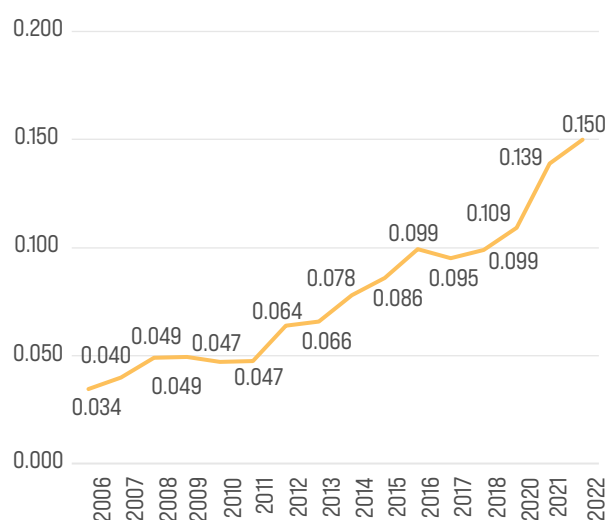
Source: ESCWA calculations based on the World Economic Forum, Global Gender Gap Reports, 2022.

At the current rate, it will take the Arab region 149 years to close the gender gap while the global projected rate is 132 years (figure 14).²⁷

In terms of achieving economic parity, the region scores 45 per cent on the Economic Participation and Opportunity subindex, which measures the gender gap in labour force participation, wage equality, income and the proportion of women in managerial, professional and technical roles. This reflects significant progress of 6 percentage points since 2020 (figure 15). In 2022, Kuwait and Jordan were the best performing countries with a closed gap of 54.2 per cent and 53.7 per cent respectively, while Egypt, Morocco and Tunisia performed poorly with a closed gap of less than 45 per cent.²⁸

Progress varied when disaggregating the indicators that constituted the subindex. On estimated earned income, the data show that women in the Arab region on average earn only 23.91 per cent²⁹ of what men earn, indicating a low gender parity level in terms of income. Across countries, Algeria reported the lowest levels of income parity

Figure 16. Trends in closed gender gap in the Political Empowerment subindex



Source: ESCWA calculations based on the World Economic Forum, Global Gender Gap Reports, 2022.

(18.4 per cent), while the highest is seen in the Comoros (57 per cent). On wage equality for similar work, the region holds an average of 75.5 per cent.³⁰ With a score of 82 per cent, Algeria is the sole outlier in the region.

The widest gender gap for all regions globally is on the Political Empowerment subindex, and the Arab region is no exception. It registered the third lowest regional score ahead of East Asia and the Pacific and Central Asia.

In 2022, the Arab region managed to close 15 per cent of its gap on the Political Empowerment subindex, in comparison to 22 per cent globally. This represents slight progress (1.1 percentage points) relative to 2021 (figure 16).

Currently, the United Arab Emirates leads on this subindex with a score of 0.402; it has achieved full gender parity at the parliamentary level. Kuwait, however, is currently lagging with the lowest score (0.023) across the Arab countries.

Inequality and food security

02



Key messages

01



Food insecurity locks inequality into the next generation: children born to women with an iron deficiency are more likely to be born prematurely and have a lower birth weight.

02



The Arab region is characterized by severe inequalities in access to quality nutritious food; 33.3 per cent of the population are food insecure and 28.4 per cent are obese.

03



Undernourishment affects 11.9 per cent of the region's population (53 million people), higher than the global average of 9.3 per cent.

04



The Arab region produces less than half of the food it consumes.

05



A third of the women of reproductive age in the Arab region suffer from anaemia.

06



Floods and droughts, hyperinflation, and conflict and occupation contribute to high levels of food insecurity in Iraq, Libya, the State of Palestine, Somalia, the Sudan, the Syrian Arab Republic and Yemen.

07



Between 76 and 120 kg of food is wasted per person per year in the Arab region, with varying rates between countries; wealthy households waste more food than those living in poverty.

08



The entire population of the GCC has access to safe drinking water and sanitation services while in LDCs, only two-thirds of the population have access to drinking water and less than half to sanitation services.

09



Households living in poverty in Algeria, Egypt, Morocco, the Syrian Arab Republic and Yemen experience income loss due to climate hazards two times more than the rich.

10



The average Arab household spends one third of its earnings on food.

11



Obesity rates are higher for females than for men in the Arab region.

Inequality and food security

02



Food security is defined as “when people have physical, social and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.

Source: FAO, *The State of Food Insecurity in the World 2001*

A. Introduction

Despite notable progress towards reducing hunger since the 1996 World Food Summit, there are still millions of people around the world suffering from food insecurity, with big disparities between countries and households. In the Arab region, food insecurity is most prevalent in the least developed and conflict-affected countries, while less so in high-income countries. Within countries, vulnerable groups such as refugees, women and people living in rural areas are at higher risk of food insecurity.

The relationship between inequality and food security is complex and multilayered.

This chapter explores this interconnection using the Food Security Monitoring Framework in the Arab region.³¹ It analyses how inequalities exist in the four pillars of food security: availability, access, utilization and stability, and within the indicators identified in the Framework, and how they translate into inequalities in food security core indicators (undernutrition, obesity and experience of food insecurity). Inequalities are analysed at three levels: between countries; between households; and within households, and the ways they reinforce one another are considered. Figure 17 expands the Food Security Monitoring Framework to analyse the relevant indicators from an inequality lens.

Inequality in food markets

The links between food insecurity and inequality are rooted in the unequal distribution of social, political and economic power both in general terms and in how food is made and distributed. For example, in many countries, small-scale producers are excluded from participating in decision-making regarding the national and global food policies that affect them. Globally, there are clear concentrations of capital and market shares that allow agrifood corporations to influence the price of food and food inputs as well as their supply and quality. Global policymakers and private companies also have the power to block food policies and the sharing of intellectual property.

Power in the global food system is now so concentrated in the hands of these corporations that they largely determine which foods move from producers to consumers and how. Three transnational firms – Monsanto, DuPont and Syngenta – dominate commercial seed transactions globally; another three – ADM, Bunge and Cargill – are responsible for most international grain trade. This system is often visualized as an hourglass: food is grown by millions of farmers worldwide, and every person in the world eats. However, getting food from “farm to fork” is increasingly mediated by a few large commodity distributors, suppliers, retailers, and processing and packaging firms.^a

Additionally, food speculators also play a considerable role in determining food prices globally. In the United States of America, experts predict that deregulated speculative activity is responsible for somewhere between 10 and 25 per cent of food prices.^b Speculators rushing into the grain market when there is a supply shock exacerbate scarcity and push prices up further.

Analysing how profit is made in food markets and the role of financial regulations is key to understanding global changes in food prices and how inequality dynamics are perpetuated in food systems.

^a <https://www.globalhungerindex.org/issues-in-focus/2017.html>.

^b Ashoka Mukpo, [Did Wall Street play a role in this year's wheat price crisis?](#), 2022.

B. An inequality lens on food security

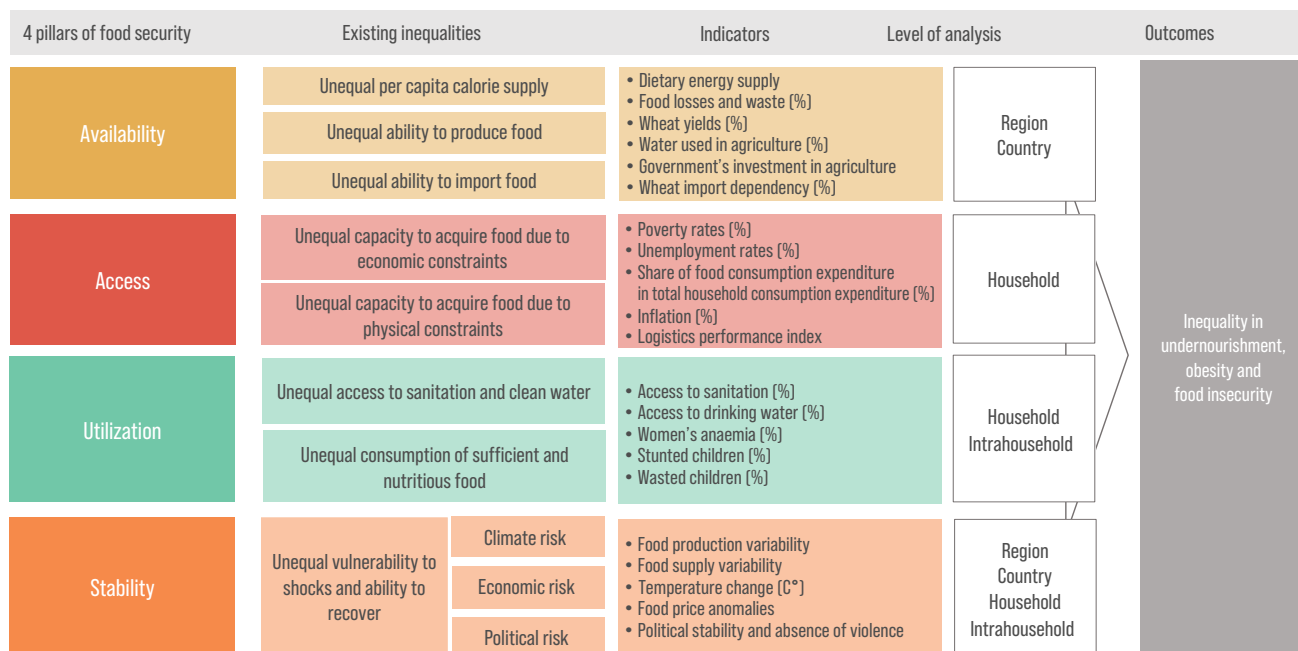
1. Food availability

The first step towards food security is ensuring the availability of sufficient quantities of food in a country, supplied through domestic production or imports, including food assistance. Food availability can be measured through the total calorie supply in the country. It is primarily determined by two factors: national production and the ability to import food. The Arab region

currently produces only approximately half of the calories it consumes³² and faces significant challenges to increase its agricultural production. The region is highly dependent on food imports and is thus vulnerable to changes in world food prices. The region imports 61.4 per cent of its cereal,³³ which is the most important food group and main source of calories. This section describes the food availability challenges in the Arab region and the inequalities observed in all their dimensions.

Figure 17. Inequalities and the Food Security Monitoring Framework

Relationship between food security and inequality



Source: ESCWA elaboration.

• Per capita calorie supply

The amount of food available at the country level can be estimated through the calories derived from all food supplies (production and imports minus exports) each day and for each person captured in the FAO Dietary Energy Supplies (DES) indicator. Despite the Arab region having a higher average DES (3,048 kcal/capita/day) than the global average (2,693 kcal/capita/day) between 2019 and 2021, there were considerable variations amongst its countries.

The GCC and MICs have an average calorie supply of over 3,200 kcal/capita/day, while countries in conflict and LDCs have 23.69 per cent and 18.34 per cent less, with 2,442 and 2,613 kcal/capita/day, respectively. In addition, from 2010 to 2020, countries in the region witnessed unequal changes in their DES. The highest increases were experienced by both GCC and LDCs, with 5 per cent and 7 per cent increases, respectively. In contrast, calorie levels stagnated or declined in MICs

and countries in conflict. The biggest decreases were experienced by Jordan (-10 per cent), followed by Yemen (-5 per cent), Lebanon (-4 per cent) and Egypt (-3 per cent).³⁴

The DES indicator is not sufficient to fully assess the security of food availability in a country because it does not consider the caloric needs of individuals, nor does it account for food that is not consumed because of losses and waste. The average DES adequacy indicator usually complements analysis by presenting the calories available over the estimated calories needed by the population of the country. The Arab region's average DES adequacy was 129.2 per cent from 2019 to 2021, implying that DES were about 30 per cent higher than what was required for a healthy and active lifestyle. Nonetheless, significant differences were observed across subregions and countries, with countries in conflict and LDCs presenting 109 per cent and 117 per cent, respectively, and GCC and MICs, 131 per cent and 143 per cent respectively.³⁵

Losses of soft wheat and dates in Morocco

Soft wheat losses in Morocco occurred mainly due to deficient storage practices, with up to 20 per cent losses for underground storage and 10–15 per cent losses for room storage. Dates were spoiled due to deficient storage practices, with up to 20 per cent losses for underground storage and 10–15 per cent losses for room storage. Dates were also spoiled during cultivation and harvest due to insects (10 per cent), birds (15 per cent) and poor harvesting practices (1–3 per cent).

Source: ESCWA, *Working paper: food loss in Morocco*, 2022.

Despite the DES and average DES adequacy indicators suggesting that there is sufficient food for everyone in the Arab region, there are inequalities in the access to food among different groups and an important proportion may not be consumed due to losses at different stages (including production, transportation, storage and consumption). It is estimated that about one third of the region's food is lost or wasted.³⁶ Decreases in quantity or quality of food at the supply chain level are termed food loss, while decreases that happen at retail, food service and consumer levels are referred to as food waste. In the Arab region in 2019, it is estimated that there was a food loss rate of 5.4 per cent, with higher rates in MICs (6.9 per cent) and lower rates in countries in conflict (4.4 per cent), the GCC (2 per cent) and LDCs (2.6 per cent).³⁷

While reliable data on food waste are scarce, estimates suggest 76–120 kg of food per capita per year (kg/capita/year) of food is wasted at the household level in the Arab region.³⁸ Data suggest higher rates of food waste in low- and middle-income countries compared to high-income countries, but variations are too high to be able to draw concrete conclusions. At the household level, the studies available show higher levels of waste by wealthier households compared to poorer households in the same country. A study in Al-Kut city in Iraq, for example, found that high-income families wasted on average 166 kg/capita/year, compared to 111 kg/capita/year in low-income families.³⁹

• Food production

The Arab region produces on average 40 per cent of its cereals needs, with higher rates among LDCs and as low as 6 per cent for GCC countries.⁴⁰ There are several factors contributing to limited national food production, including

low agricultural productivity, water scarcity and limited fertile soils. These challenges are not equally apparent in all Arab countries; and the abilities of countries to overcome these challenges also differ.

Low agricultural productivity

There are continued low yields of local production, which are 20 per cent below their potential.⁴¹ MICs account for close to 65 per cent of the cereal production in the region and have achieved much higher yield increases during the past years than countries in conflict, LDCs or GCC countries. This high performance is mostly attributable to Egypt, due to its widespread irrigation networks. In the LDCs, yields are only a fraction of what is achieved elsewhere; yields have remained low, 50 per cent or less of their potential, and stagnant for several decades.

Water scarcity

More than half of the Arab region's renewable water resources are already allocated to the agricultural sector, but there are wide disparities between countries. Iraq, Mauritania, Somalia, the Sudan and Yemen are currently using more than 90 per cent, while Bahrain, Djibouti, Lebanon and Qatar are using under 40 per cent. Water scarcity in the region coexists with low water use productivity due to wasteful irrigation practices and lack of investment in infrastructure.

Limited availability of fertile arable land

The region is very dry, with 95 per cent of land classified as hyperarid. The scarce fertile land available is shrinking due

Long-standing conflict in the Sudan has destroyed the irrigation infrastructure and reduced productivity. It has diminished the country's ability to invest in new projects, create jobs and increase people's incomes. Conflict has also increased the country's dependency on other countries and widened the gap between the Sudan and neighbouring countries.

Source: Jamal Al-Nil, Deputy Minister of Social Development, the Sudan.

to urbanization and land degradation, with 73 per cent of the region's arable land already degraded. High-risk areas include the mountains in Lebanon and Yemen; coastal plains susceptible to seawater intrusion such as in Gaza or the Nile Delta; desert encroachment in the Sudan and the Arabian Peninsula; and salinization in the Jordan Valley. One of the reasons for land degradation is soil erosion from reductions in vegetation cover. This phenomenon has been particularly pronounced in the Comoros, Djibouti, Mauritania, Somalia, the Sudan and Yemen in recent years, with an average reduction of 33 per cent from 1998 to 2006.⁴²

At the household level, and especially in low- and middle-income countries, the agricultural sector is a critical source of income and food security for people living in rural areas, which represent 41 per cent of the Arab region.⁴³ The share of people employed in agriculture is a lot higher in Somalia (80 per cent), the Sudan (38 per cent), Comoros (34 per cent) or Morocco (33 per cent) than in GCC countries such as Bahrain (1 per cent), Qatar (1 per cent) and the United Arab Emirates (1 per cent).

Between 75 and 85 per cent of agricultural land holdings in the Arab region is held by family farmers that practice small scale, mostly rain-fed, traditional agriculture. Up to

three quarters of them report having to work in off-farm activities to complement their income.⁴⁴ This contrasts with the existence of highly productive and mechanized commercial farms. This duality in the agricultural production system builds on structural inequalities that include access to land and agricultural inputs.

It is estimated that 84 per cent of farms worldwide belong to smallholder farmers (those owning under 2 hectares of land) that produce 35 per cent of the world's food and own just 12 per cent of agricultural land.⁴⁵ Meanwhile, the largest 1 per cent of farms operate more than 70 per cent of the world's farmlands. The Arab region has one of the most unequal farm size distributions in the world: 80 per cent of farms occupy 20 per cent of the territory while 10 per cent of farms holds 60 per cent of agricultural land.⁴⁶ In addition, some vulnerable groups, including women-headed households, are less likely to have control over agricultural land. The proportion of women landholders in the Arab region is under 10 per cent in most countries where data are available, such as in Saudi Arabia (0.80 per cent), Jordan (3 per cent), Algeria (4.10 per cent), Morocco (4.40 per cent) and Egypt (5.20 per cent), with the notable exception of the Comoros (32.60 per cent).⁴⁷

Another level of inequality is in access to agricultural inputs, with small-scale agriculture being characterized by lower use of fertilizers, certified seeds, agricultural machinery and irrigation technologies than large-scale agriculture. This leads to comparably lower yields and, subsequently, lower income. Differences in input use can be observed between countries too, with the Sudan and the Syrian Arab Republic consuming under 10 kg of fertilizers per hectare (kg/ha) of arable land while Bahrain and Kuwait consume more than 1,000 kg/ha.⁴⁸ Similarly, the average number of tractors per 100 km² in Somalia is 12, compared with almost 400 in Egypt.⁴⁹ Finally, the most vulnerable farmers have limited access to information on agricultural practices and financial products, such as credit and insurance, which contributes to maintaining existing inequalities.

• Trade

Due to physical and environmental constraints to producing food domestically, most countries in the Arab region are and will likely remain highly dependent on the global food markets to meet their food needs. Maintaining imports of strategic food commodities remains key to ensuring

sufficient food availability. There are, however, big disparities among countries in terms of import dependency and the risk of not being able to maintain food imports in the long term. For cereals, a critical commodity for food security, the import-dependency ratio from 2018–2020 was above 90 per cent in GCC countries, Djibouti, Jordan, Libya and Yemen, while under 50 per cent in most LDCs and Egypt.⁵⁰ Given the expected population growth and current agricultural productivity, in the years to come it is estimated that the region will have a higher food trade deficit.⁵¹

Countries with an overall trade deficit and a high ratio of food imports may see their foreign currency reserves diminishing and experience difficulties in maintaining levels of food imports, especially when facing increasing world prices and international supply chain disruptions. The average share of food imports over total merchandise exports for the Arab region during 2018–2020 was 10.6 per cent, but with much large rates in poorer countries, such as Somalia (409 per cent), the Comoros (292 per cent) and Yemen (225 per cent). Some oil exporting countries present below the global average rates, such as Qatar (4 per cent) and the United Arab Emirates (5 per cent).⁵²

A complex relationship exists between trade and inequality. On the one hand, increased international trade has the potential to reduce inequalities between countries, create employment and raise living standards. On the other hand, trade can increase inequalities within countries, with incomes rising at the top of the distribution while incomes at the bottom remain stagnant.⁵³ Within countries, increased international trade generally benefits both consumers and productive export-oriented sectors, while small-scale agriculture may suffer from income, wage and employment decreases due to existing market failures and asymmetries.⁵⁴ Trade can thus increase inequalities in food production in the absence of targeted policies such as the creation of farmer cooperatives, contract farming, improved transport infrastructure, and policies encouraging the consumption of products with short marketing channels.⁵⁵

2. Access to food

Food security involves not only ensuring that enough food is produced or imported into a country, but also guaranteeing that the entire population has the economic

and physical means to access to it. Amartya Sen, in his book “Poverty and Famines”, stated that “some of the worst famines have taken place with no significant decline in food availability per head”, showing that often the most important challenge is not lack of food availability but rather access to it.

In most countries, inequalities in access to food are related primarily to differences in income and are affected by macroeconomic conditions such as unemployment and inflation rates. For conflict areas, physical access to food may be an important constraint as well.

• Poverty, inequality and access to food

Currently, millions of people in the Arab region lack access to a healthy diet due to economic reasons. This problem is especially acute in countries such as the Sudan and Mauritania, where 91.80 per cent and 60.70 per cent of the population, respectively, cannot afford to eat healthily.⁵⁶

Economic growth is a necessary condition to improve access to food in the region, but it is not the only contributing factor. Inequality dynamics in a country can block poorer and marginalized groups from reaping the benefits of economic prosperity while they bear many of the costs. In the absence of tailored social policies, limited ability to cope with shocks and segregation from economic activity can put poor households at a high risk of food insecurity. There is a threefold increase in severe food insecurity in countries with high income inequality (21 per cent) compared with countries with low-income inequality (7 per cent); the effect is 20 per cent higher for low-income countries (LICs) compared with MICs.⁵⁷

The Arab Barometer (October 2021–July 2022) survey of 12 countries in the region showed a direct relationship between inequality and food insecurity. Almost half of the sample reported running out of food and not having enough money to buy more; their experience was strongly correlated with having a monthly income lower than their country’s median salary. Additionally, 60 per cent of households stated that their earnings did not cover their basic expenses, and 76 per cent did not have savings. These factors severely limit the ability of households to cope with economic shocks and to maintain steady consumption of food.⁵⁸

Members of the ESCWA Group of Experts on Social Protection Reform believe that inequality exists in all four dimensions of food security: availability, access, utilization and stability. The economic repercussions of the COVID-19 crisis, mainly unemployment, have caused additional pressures since 2020, while the recent war in Ukraine has obstructed one of the most strategic food supply chains in the Arab region and triggered sharp economic distress and acute increases in food prices. Consequently, people living in poverty and vulnerable groups are finding it difficult to obtain adequate food due to the decrease in their purchasing power. National strategies on food security were not efficient enough to ensure that no one was left behind.

Members of the ESCWA Group of Experts on Social Protection Reform

Some social and demographic groups are disproportionately at risk, such as people living in rural areas, women and other vulnerable groups. The rural-urban divide explains up to 40 per cent of the inequality in low- and middle-income countries.⁵⁹ In the Arab region, about 174 million people lived in rural areas in 2018, slightly over 40 per cent of the population. For Egypt, the Sudan and Yemen, the proportion goes up to 75 per cent. Most rural areas of the Arab region are still relatively poor, with overall rural poverty estimated at 34 per cent, ranging from 8 per cent in Tunisia to over 80 per cent in the Sudan. About two thirds of farmers practice relatively low yielding rain-fed and pastoral agriculture is dependent on a fragile natural resource base. Rural poverty can be even more acute when combined with other sources of vulnerability such as in women-headed households, the landless, and those with increased climate vulnerabilities.

• Socioeconomic factors affecting food access

In addition to general income inequalities, there are important economic factors that negatively affect food access for the poorest segments of the population, such as high levels of unemployment and inflation.

In 2021, the Arab region had an unemployment rate of 12.4 per cent, double the global average (6.2 per cent), but with big differences between regions. GCC countries, notably, present low unemployment rates

(5.6 per cent) and act as a source of jobs for migrants from neighbouring countries. LDCs present the highest levels of unemployment (19.3 per cent). Within countries, access to employment is unequally distributed, with young people, women, persons with disabilities and refugees experiencing higher levels of unemployment and underemployment. In 2020, 35.6 per cent of young people in the region were not in employment, education or training, compared to the global average of 23.3 per cent. The labour force participation of women (over the age of 15) is markedly lower than the global average, also, with only 19.43 per cent per cent of women participating in 2021 compared to 46.18 per cent globally.⁶⁰

Unemployment and underemployment can severely affect food security outcomes in countries with limited social security policies, which are often the most affected by poverty. Unemployment significantly exacerbates the negative effects of income inequality on food security.⁶¹ Data from the Arab Barometer (October 2021–July 2022) survey show higher rates of food insecurity among the unemployed compared to those who are currently working.⁶²

Inflation levels and economic instability due to the COVID-19 crisis and the war in Ukraine, along with other structural factors, have had a strong effect on food security outcomes in LICs and households. LDCs are usually more vulnerable to global price changes as they

Rural women and food security

Women are key players in food security, as they are involved in all stages of food systems, including farming, food processing, marketing and household consumption. While rural women are an important share of the agriculture labour force in the Arab region, they often have worse working conditions than men; they are lower paid and their work can be irregular, informal or low-skilled. Women are also more likely to undertake a disproportionate share of unpaid care work. Globally, women in food systems earn 82 cents for every dollar earned by men.^a In addition, they are less likely to own land than men, with over 96 per cent of landowners being male in most Arab countries where data are available.^b Gender inequalities are reinforced by poverty dynamics, resulting in rural women facing limited access to education, healthcare, sanitation and other basic services. A 2023 FAO report estimates that reducing gender inequalities in global food systems would translate into \$3 million additional profit and reduce food insecurity for 45 million people.^c

^a FAO, *The status of women in agrifood systems*, 2023.

^b World Bank data. Available at <http://info.worldbank.org/governance/wgi/>.

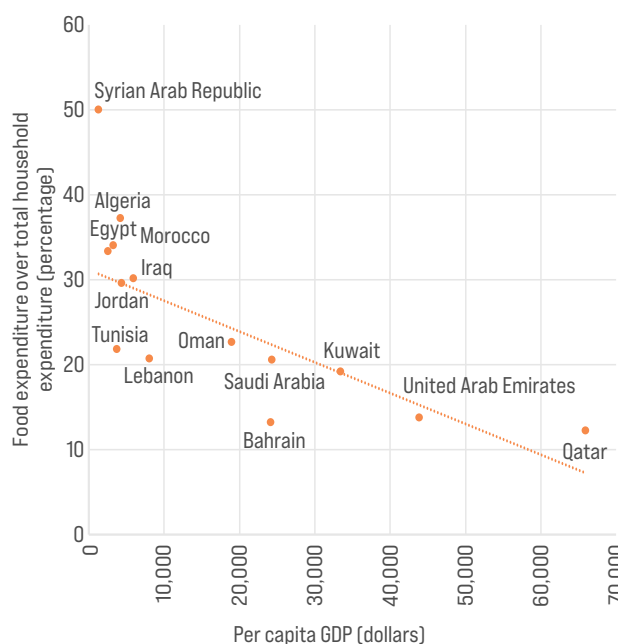
^c FAO, *The status of women in agrifood systems*, 2023.

absorb them more rapidly than developed economies due to their shorter supply chains. Currently, GCC countries experience very moderate levels of inflation, below the global average. LICs present higher inflation levels. The situation is particularly acute in Lebanon, with a 154.8 per cent inflation rate in 2021, and in the Sudan, with 382.8 per cent. Additionally, Mauritania, Somalia and Yemen are at increased risk of overlapping debt and food security crises.⁶³

Variations in food prices can limit the ability of the population to access the food they need. This is especially true for those lower-income households that spend a greater proportion of their income on food and that have limited ability to cope with shocks. In 2018, the average Arab household spent 31.3 per cent of its earnings on food, with substantial regional variations; GCC citizens spent 19 per cent of their income on food, compared to 50 per cent in the Syrian Arab Republic.⁶⁴

Within countries, poorer populations spend a much higher share of their income on food than the wealthy. In Egypt, food expenditure represented 40.55 per cent of the budget of those living in poverty in 2020, compared with only 13.37 per cent for the rich.⁶⁵

Figure 18. Relationship between per capita gross domestic product and share of income spent on food, 2018



Source: ESCWA calculations based on data from the World Bank Statistics and Knoema.

Similarly, in the State of Palestine, food accounted for 35.42 per cent of household expenses for the 10 per cent of the population with the lowest income, while the richest spent only 20.59 per cent.⁶⁶ Given that wages usually rise more slowly than prices, households that spend a high share of their income on food are more likely to be at risk of food insecurity.

- **Physical factors constraining access to food**

Despite most countries in the Arab region having enough food available at the country level, certain segments of the population might not have physical access to it. It relates to the state of the country's infrastructure and logistical systems and whether basic products reach all population groups and all regions of the country. Physical access can be a challenge for people living in rural areas, those living in countries in conflict or occupation with disrupted supply chains or damaged infrastructure, or for countries with a sudden arrival of refugees and limited infrastructure to support them. In all cases, it is often those living in poverty and the most vulnerable segments of the population who are at risk of insufficient access to food.

Well-functioning logistical processes and infrastructure are key to ensuring universal access to food. The Logistics Performance Index evaluates the efficiency of clearance processes, the quality of the transport infrastructure and services, the existing tracking systems and the timeliness of shipments. The Arab region performs poorly on average, with a score of 2.6 over 5. GCC countries present 3.2, above the global average of 2.9, while countries in conflict rank lower than the rest of the Arab region with just 2.2.⁶⁷ Logistical constraints mean that urban areas generally have better access to markets and to a wider variety of food products compared to rural areas, contributing to the inequalities between them. In urban areas where the supply of food may not be an issue, other challenges may be observed such as the affordability of nutritious food products.

Events happening at the global level have significant effects on physical access to food. The COVID-19 pandemic caused multiple countries to experience shortages of key items due to international supply chain disruptions, interruptions to production, and food hoarding behaviours. These disruptions disproportionately affect the urban poor, who rely entirely on the market for their food needs and have limited economic capacity to cope with shocks.

Conflict and occupation: a threat to stable access to food

In Yemen, multiple constraints slow down food imports and transport. The reduced traffic in Al Hodeidah Port due to the restrictions triggered by the conflict put additional pressures on the port of Aden, which is handling increased numbers of import containers. Road transport from Aden to Sana'a takes between six to nine days, compared to one day before the war, and is subject to checkpoints. In addition, conflicting regulations set by the Government of Yemen and the Houthi movement "Ansar Allah" party result in the double taxation of goods and additional bureaucratic procedures, making it increasingly complex for traders to operate.^a

Similarly, in the State of Palestine, the Israeli closure of the Sufa and Karni ports has severely limited international trade in Gaza for years. The Salah Ad Din gate is the only entrance for international goods and is subject to severe restrictions and bureaucratic processes by the Government of Israel, which resulted in a 30 per cent reduction in the volume of truckloads entering Gaza from 2007 to 2022.^b

^a ACAPS, *Yemen Analysis: Food supply chain*, 2020.

^b ACAPS, *Briefing Note, Palestine: Flooding in the Gaza Strip*, 2023.

3. Food utilization

In addition to ensuring that there is adequate food availability in a country and that households have physical access and the economic means to access to it, other factors are needed to ensure equal utilization of food. This includes access to sanitation and water to handle food in a safe way and consuming food in the right amounts to ensure proper nutritional outcomes.

- **Access to sanitation and clean water**

Food should be handled and prepared in a way that is safe for human consumption. Deficiencies in clean water and sanitation as well as overuse of fertilizers and pesticides impact food safety and quality and lead to higher incidence of disease. In the Middle East and North African (MENA) region, the number of people dying from diarrhea is similar to the number of casualties resulting from violent conflict.⁶⁸

While drinking and sanitation services have good penetration rates in the Arab region on average, with of 88.8 per cent for basic drinking water and 83.4 per cent for sanitation, there are big differences between groups of countries. Only 60.7 per cent of people in 2020 in LDCs had access to basic drinking water services and only 38.8 per cent to sanitation services. In GCC countries, almost all the population have access to both (98.1 per cent and 98.6 per cent, respectively).⁶⁹ At the subregional level, rural areas generally present lower rates of sanitation infrastructure than urban areas.

- **Inequalities in food consumption at the household and intra-household levels**

Sufficient energy and nutrient consumption by individuals results from appropriate feeding practices, food preparation techniques and diversity of diet. Poverty leads families to consume lower amounts of calories and have less diverse and nutritious diets, which impacts their health in multiple ways.

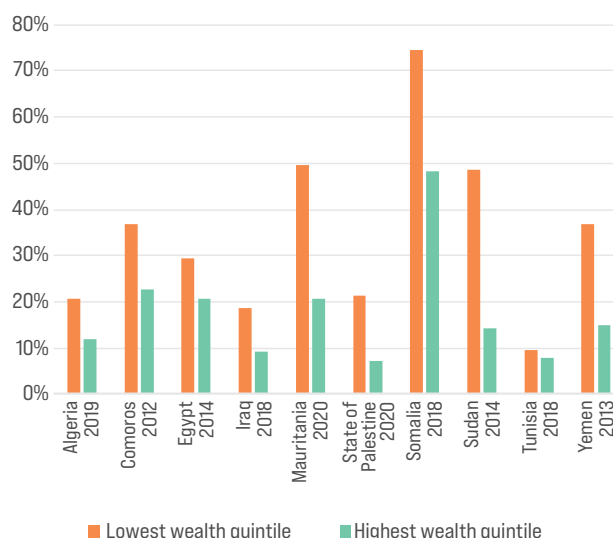
In the Arab region, some countries present big differences in total calorie intake among households, as reflected by the coefficient of variation of habitual caloric consumption presented in figure 17. High-income countries, such as the United Arab Emirates, have low variations in habitual caloric consumption, standing at 0.23, indicating low levels of

food consumption inequality. Countries in conflict or under occupation present large variations reflecting significant levels of inequality in food consumption.

Diets need to provide enough calories to the entire population and, crucially, also the right level of nutrients. Detailed information on diet composition, however, is often scarce and difficult to collect. In such cases, analysis of inequalities in diet quality and diversity is conducted using self-reported consumption data and the prevalence of health problems derived from lack of proper nutrition – such as women’s anaemia, child stunting or child wasting.

Household surveys show that a significant number of children under 5 years of age in the Arab region regularly consume just two food groups or less, which is considered a sign of severe food poverty given that children need to consume foods from at least five out of the eight recommended food groups to meet the minimum dietary diversity for healthy growth and development. Rates of severe food poverty are particularly high in countries in conflict and LDCs such as Somalia (63 per cent), Mauritania (38 per cent) and the Sudan (34 per cent), and among the poorest population groups in each country, as presented in figure 19.⁷⁰

Figure 19. Percentage of children under 5 years old who consume two or less food groups per wealth quintile and country



Source: ESCWA calculations based on the United Nations Children’s Fund (UNICEF) child poverty data. Only countries with data available have been included.

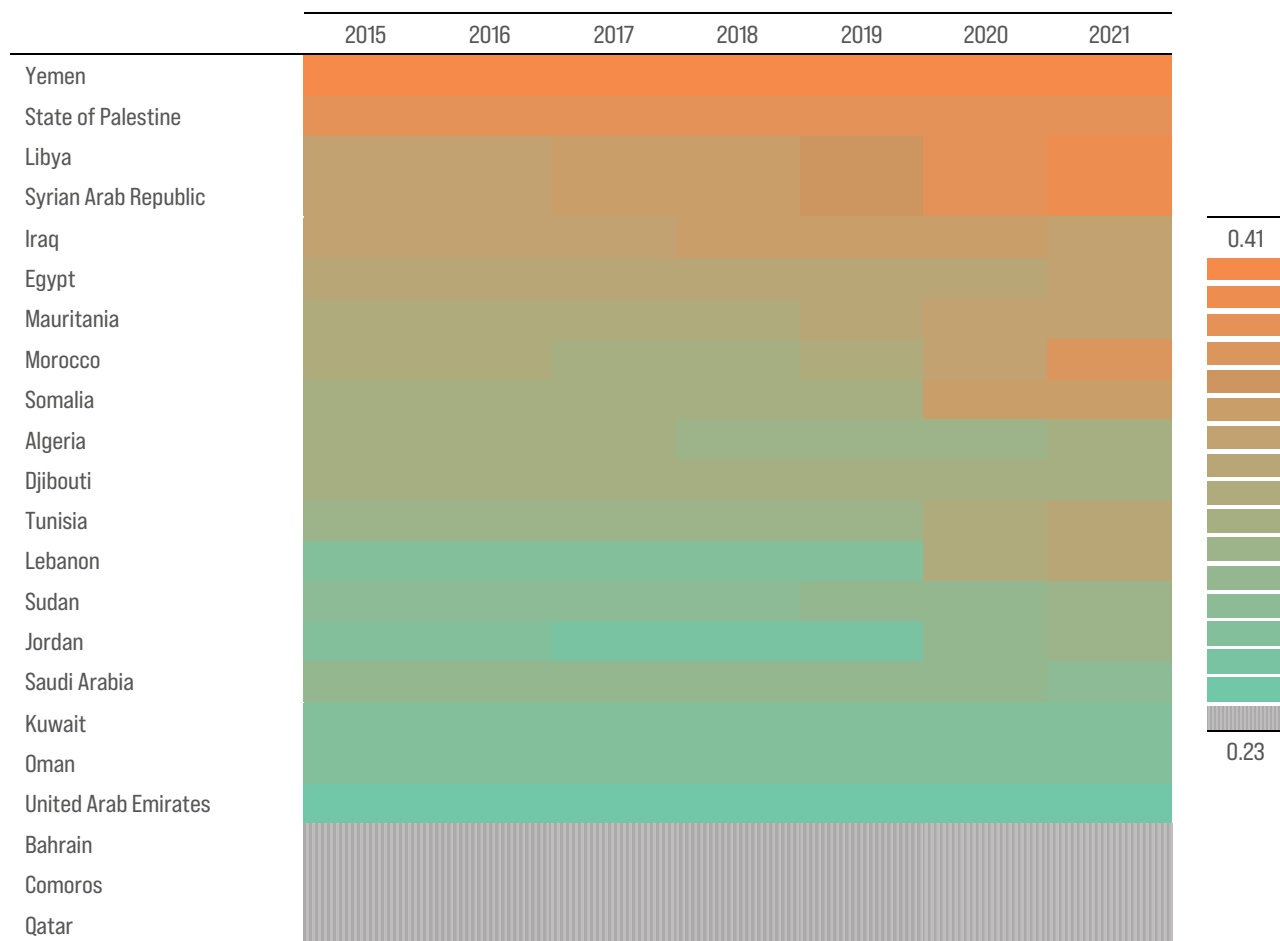
Iron deficiency anaemia among women is considered one of the main public health concerns in the Arab region. Almost a third of women of reproductive age in Arab countries suffered from anaemia in 2019, with higher rates among LDCs (38.5 per cent) and countries in conflict (39.5 per cent), and slightly lower rates in GCC countries (27.1 per cent) and MICs (30.3 per cent).⁷¹ Regionally, women's anaemia is generally more present in poorer households. In Mauritania in 2021, for instance, the prevalence of women's anaemia was 68.9 per cent among the poorest population quintile while at 45 per cent among the wealthiest.⁷²

Levels of child stunting and wasting are high among some population groups, especially in LDCs and countries in conflict, as well as among specific vulnerable populations.

The prevalence of stunting among children under 5 years in the Arab region was 19.4 per cent in 2020,⁷³ while the share of children under 5 years affected by wasting was 7.7 per cent in 2020, higher than the global average of 6.7 per cent. Regionally, child wasting and stunting are more prevalent among poorer population groups, as shown in figures 20 and 21.

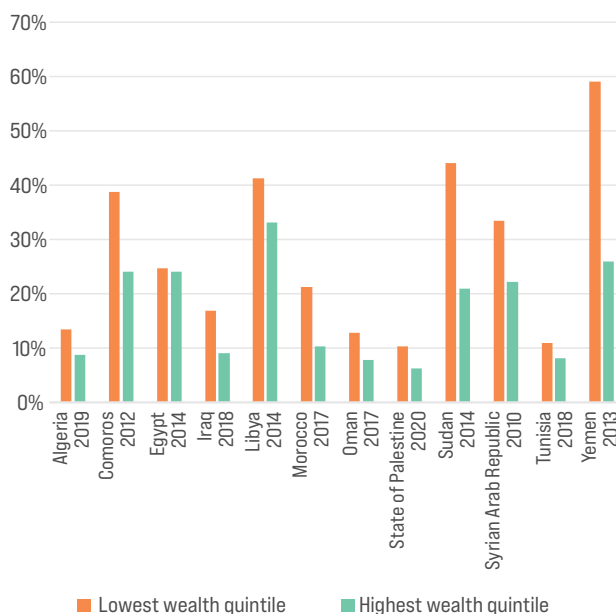
Poor mother and child nutrition is of particular concern given its long-lasting effects on the lives of those living in poverty. Mothers who are lacking in iron are more likely to have children who do not grow well during pregnancy and have a low birth weight.⁷⁴ The long-term impacts of low birth weight include increased rates of diabetes,

Table 1. Changes in the coefficient of variation of habitual caloric consumption by country, 2015–2021



Source: ESCWA elaboration.

Figure 20. Stunting prevalence among children under 5 years old by wealth quintile and country



Source: ESCWA calculations based on UNICEF data. Only countries with data available have been included.

Figure 21. Wasting prevalence among children under 5 years old by wealth quintile and country



Source: ESCWA calculations based on UNICEF data. Only countries with data available have been included.

cardiovascular disease and obesity.^{75,76} In addition, children experiencing food insecurity are more likely to suffer from cognitive losses, mental health issues and lower educational outcomes.⁷⁷ These health and developmental effects persist well into adulthood and impact employment outcomes and productivity and, consequently, the ability to escape poverty. This vicious cycle perpetuates and sustains inequality across generations.

4. Stability

Stability relates to the ability of countries and households to face various types of negative shocks without modifying their food consumption patterns. Shocks might be sudden, such as an unexpected increase in food prices or a drought, or cyclical, such as food availability linked to agricultural harvest times.

The ability to cope with and recover from shocks is intrinsically linked to poverty and inequality. S. Nazrul Islam and John Winkel show that inequality leaves disadvantaged

households more exposed to shocks.⁷⁸ Given the exposure level, poorer households suffer greater damages than richer households and have less ability to recover from such damages. For example, poorer households are more likely to live in flood-prone areas with insufficient infrastructure, which means they are more susceptible to the impacts of extreme rains. When a flood occurs, they might suffer increased damage to their housing given the low-quality materials used for construction. They might have less savings to cope with the losses, as well as being less likely to be covered by insurance. These same principles apply at the country level, with poorer countries being more susceptible to shocks, experiencing more damage when shocks happen and having fewer resources to recover. In turn, this process exacerbates existing inequalities, making LICs and households poorer as a result of shocks.

Shocks can impact food security both at the macro level, through changes in food supply in the country, and at the micro level, through changes in the ability of households to acquire food. At the macro level, FAO data show very

different levels of per capita food supply variability in the Arab region, with countries in conflict, notably the Syrian Arab Republic and Yemen, presenting the largest variations in available kcal per day per person.⁷⁹ Closely related to food supply, the variability of food production in the Arab region has increased in the last decade. The average per capita food production variability in the Arab region was \$15,200 in 2019, compared to \$14,000 in 2010. The highest variabilities were recorded in Morocco and Tunisia. At the household level, changes in the ability to acquire food are best analysed through changes in nutritional and food security outcomes over time and through households' ability to cope with shocks without depleting important resources.

Food security inequalities between and within countries contribute to poor households' inability to cope with shocks. At the same time, these inequalities are likely to exacerbate food insecurity when affected by a shock if effective action is not taken. The rest of this section briefly discusses how three different types of shocks – climate, economic and political – affect food security and inequality in the Arab region.

a. Climate shocks

Climate change is affecting food security globally through reduced crop yields, increased food loss and damaged ecosystems. The world has been witnessing extreme weather events such as floods and droughts that have an immediate impact on the livelihoods and food security of vulnerable populations. At the same time, climate change's long-term impacts, such as reduced water supplies and increased soil salinity, affect the environments in which food is produced and pose a threat to long-term food availability in vulnerable countries.

The Arab region is one of the areas most affected by climate change in the world. Some of the main environmental challenges the Arab region experiences are high temperatures, water scarcity and soil degradation. Temperatures have increased by an average of 1.9 degrees Celsius since pre-industrial levels and are projected to increase by 2.5 degrees Celsius by mid-century.⁸⁰ Higher temperatures affect agricultural production but also general productivity in urban centres. They put the safety and quality of food at risk in the absence of reliable cold chains and storage infrastructure. In addition, already

scarce water resources will be under increased pressure due to a predicted decrease in precipitation of about 8–10 mm/month by the end of the century.⁸¹ This is especially alarming for countries that depend on rain-fed agriculture, such as Algeria, Iraq, Jordan, Lebanon, Libya, Mauritania, Morocco, the Sudan, the Syrian Arab Republic, Tunisia and Yemen, where rain-fed agriculture is practiced on more than half of all arable land.⁸² Cereals, a key commodity for food security, especially for people living in poverty, are particularly dependent on rainwater. In the Maghreb, the Sudan and Yemen, over three quarters of cereal production is rain-fed, and in the Mashreq, between one half and two thirds are.⁸³ To make matters worse, soil degradation due to the uneven distribution of rainfall and increased soil salinity due to increased evapotranspiration⁸⁴ might reduce agricultural yields, even for irrigated systems.⁸⁵

While Arab countries share many common environmental problems, inequality between them translates into different capacities to respond effectively. Options to improve climate change adaptation include building seawalls and coastal protection, systems for storm and wastewater management, water storage, efficient irrigation systems, desalinating sea water, new crop varieties, and early warning systems. However, LICs typically face more difficulties adapting their physical and agricultural systems than richer countries, making them particularly vulnerable to climate change. This is especially important given that agriculture represents a higher share of GDP in poorer countries. Also, they are often less able to compensate the reduced agricultural production by increasing food imports. In addition, indirect effects of climate change, such as global increases in crop prices or degradation of physical infrastructure,⁸⁶ might affect food trade in the future, further affecting the ability of LICs to ensure sufficient food availability.

At the household level, low-income households are more likely to have higher exposure to extreme weather events and have lower resources with which to recover from them.⁸⁷ A Wodon and others study shows that poor households in Algeria, Egypt, Morocco, the Syrian Arab Republic and Yemen reported income losses due to climate hazards more often than richer households (46 per cent versus 21 per cent). Poorer households reported having fewer means to recover from losses and were more likely to use extreme coping strategies such as selling assets or land, removing children from school, or eating less.⁸⁸

Shocks from extreme weather events are being experienced and are likely to worsen in the upcoming years, including droughts (Algeria, Morocco and Tunisia); floods; higher temperatures (especially in Algeria, Iraq and Saudi Arabia); and heat waves (particularly in cities such as Baghdad, Beirut and Damascus).⁸⁹ Food insecurity has already reached alarming levels in some countries in the region due to extreme weather events. From June to September 2022, for example, floods in the Sudan affected 278,500 people, causing around 136,000 people to be displaced and destroying over 12,000 hectares of agricultural land.⁹⁰ Combined with extreme inflation levels and tribal conflicts, the number of people expected to be suffering from acute food insecurity was forecasted to be 7.7 million in October 2022–February 2023.⁹¹

b. Economic shocks

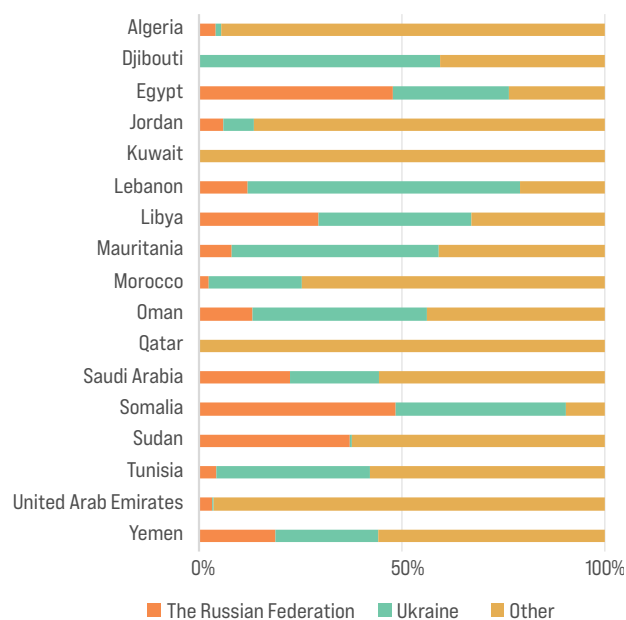
Changes in the economy heavily impact poverty, inequality and food security. Economic shocks can be sudden, as experienced with high price volatility, or can be long-term processes such as economic recessions. People living in poverty often lack the capacity to cope with sudden price increases and are disproportionately impacted by long-term economic crises. Research suggests that economic recessions affect low- and middle-income classes most severely, pushing many additional people into poverty and increasing income inequalities.⁹² This happens through a combination of factors: (a) weaker economic activity may reduce the number of jobs and push additional workers from the formal to the informal market; (b) relative price changes and currency devaluation, translating into rises in prices of imported food, particularly burden those living in poverty; and (c) fiscal retrenchment, with Governments cutting social spending programmes, causes those living in poverty to lose their safety nets.⁹³ In turn, all these factors affect households' ability to access sufficient and nutritious food.

The recent economic shocks from the COVID-19 crisis and the war in Ukraine have challenged the achievements made in terms of poverty and inequality reduction in the Arab region and have put food security at risk in multiple ways. COVID-19 has threatened food availability by both reducing food production and disrupting international trade. Among the main causes are shortages of farm labour, closure of production facilities, disruptions of supply chains and transport, and the sudden closure

of restaurant facilities. All these disruptions have led to an increase in global food prices and shortages of certain food commodities. In Jordan, for example, the initial COVID-19 emergency plan prevented farmers from reaching the fields and disrupted the harvest season. In Tunisia, farm workers' inability to reach the fields caused shortages of locally produced fruits on local markets. The Comoros and the Sudan saw their exports reduced, which led to a reduction in foreign reserves and further pressure on the currency, respectively.⁹⁴

Additionally, the war in Ukraine and the sanctions on the Russian Federation reduced the international supply of wheat, maize, barely, sunflower, fertilizers and oil, further increasing global market prices. This has benefited oil producing countries and harmed those importing food and oil, deepening inequalities between countries in the region. Many countries in the region were strongly dependent on imports from the Russian Federation and Ukraine for key

Figure 22. Arab countries dependency on imports. Share of wheat imports from the Russian Federation and Ukraine out of total wheat purchases in 2021 [Percentage]



Source: ESCWA elaboration based on data from FAOSTAT.

Note: Only Arab countries that import wheat from the Russian Federation or Ukraine have been included in the figure. In Kuwait, 0.07 per cent of wheat imports came from Ukraine. Qatar imported 0.04 per cent from Ukraine.

food commodities before the war: over 66 per cent of the wheat consumed in Egypt, Lebanon, Oman, Qatar and Somalia, and over 90 per cent of the sunflower oil in Algeria, Egypt, the Sudan and Tunisia. A number of key agricultural inputs, such as potassium fertilizer, were also acquired from the Russian Federation.

The increase in food and oil prices has led to many countries experiencing currency devaluations and depletion of foreign reserves while they try to maintain food and oil import levels, as is the case for Egypt, Lebanon, Morocco and Tunisia.

At the household level, COVID-19 and the war in Ukraine have affected people's ability to acquire food through different processes. The combined economic crises have resulted in a substantial rise in poverty; greater inequality; the emergence of a group of people newly living in poverty (those who were not living in poverty in the first quarter of 2020 but have become so since); and changes in the labour market at both the intensive (how hard people work) and extensive (how many people work) margins.⁹⁵ Many households lost their livelihoods. Unemployment rates increased throughout the region with low-skilled and informal workers and other vulnerable groups affected the most. In Egypt, around 1.6 million jobs in the informal sector were lost during the first months of the pandemic.⁹⁶ In Libya, 70 per cent of migrants and refugees were unemployed in 2020.⁹⁷ In Lebanon, families living in poverty are using extreme coping strategies such as eating less and poorer-quality food, sending children to work in hazardous work environments and marrying off young girls.⁹⁸

Rising food prices have compromised many households' ability to access food. The global price of food increased by 32.54 per cent from January 2020 to October 2022. In the case of cereals, the increase was 51.27 per cent.⁹⁹ These price increases have reduced families' purchasing power and have disproportionately affected those living in poverty, who spend a higher share of their income on food.

c. Political shocks and conflict

The Arab region is one of the most crisis-affected regions in the world. The World Bank Political Stability and Absence of Violence indicator ranks most countries in the Arab region well below the global average, with Somalia, the Syrian Arab Republic and Yemen being the worst ranked

in the world in 2021. Only Oman, Qatar and the United Arab Emirates rank above the global average.¹⁰⁰

Assessments from humanitarian organizations in some countries in conflict confirm large numbers of people are living in extreme food insecurity. It is estimated that 53 per cent of the population in Yemen are suffering from acute food insecurity.¹⁰¹ In Somalia, 33 per cent of the population is experiencing acute food insecurity, with 322,000 people at catastrophe level.¹⁰² In Lebanon, 37 per cent of Lebanese households and Syrian refugees are affected by acute food insecurity.¹⁰³ Refugees and internally displaced persons (IDPs) have been suffering from increasingly difficult situations due to reductions in humanitarian aid during 2022, especially in Somalia, Yemen and other countries in the Sahel region.

High numbers of refugees and IDPs can present challenges regarding food security and inequality in host communities as well. The effects of refugee and IDP arrivals depend on the initial characteristics of the host community and on national policies towards refugee populations. While increased demand for food can lead to temporary increases in food prices and raise the cost of living, this effect is partially offset by international food aid and can provide economic opportunities for local producers. Additionally, job openings in the humanitarian sector and investment in infrastructure may benefit the local population. However, low-skilled workers in host communities may be negatively affected by the increased cost of living and higher competition for low-skilled jobs. Risks such as environmental degradation, poor waste management and higher incidence of disease might disproportionately affect those living in poverty. Households with initial physical, social or human capital are more likely to enjoy the economic benefits of a larger market than poorer households, pointing at the need for social protection policies that cover both refugees and vulnerable people in host communities.¹⁰⁴

Identifying the causes of conflict and how it relates to food insecurity and inequality is crucial to preventing further harm to households and communities. Food insecurity and conflict are in a mutually reinforcing cycle, with each acting as a cause and consequence of the other. Conflict is currently the main driver of hunger in the world, having pushed 139 million people in 24 countries/territories into

Challenges to food security for refugees in the Arab region

Four of the top ten countries with the highest IDPs due to conflict are in the Arab region and it accounts for the largest number of refugees in the world. IDPs in Iraq, the Sudan, the Syrian Arab Republic and Yemen reached up to 15.31 million people in 2021. Somalia, the Sudan, the Syrian Arab Republic and Yemen account for the majority of new displacements.^a

Refugees are typically at increased risk of food insecurity. While accurate and up-to-date data on refugee populations are often lacking, recent studies show how dire the situation is. Around 39 per cent of Syrian refugees in Egypt, Jordan and Lebanon presented crisis or emergency levels of food insecurity in 2021.^b Among those in refugee camps in Jordan, food insecurity reached 58 per cent in 2022.^c In the State of Palestine in 2017, the food expenses of families living in refugee camps were 19 per cent lower than of the rest of the population, despite food representing a higher proportion of their budget (29.64 per cent) compared to non-refugees (25.70 per cent).^d

Refugees are highly dependent on food aid and their diets may be monotonous and not meet their full micronutrient needs, leading to health problems. A 2016 study found anaemia rates of 17 per cent among Syrian children in the Zaatari camp (Jordan), compared to the 9 per cent rate in Jordan at large.^e In addition, some studies indicate that refugee diets might have excessive fat content, leading to problems related to obesity for some individuals. In the State of Palestine, families living in refugee camps allocated higher proportions of their food budget to oils and fats compared with the rest of the population.^f A 2015–2016 health assessment of Syrian refugee children aged 6–59 months showed a 10.6 per cent prevalence of obesity.^g

^a World Bank data.

^b ESCWA analysis based on the Global Report on Food Crises: Joint analysis for better decision, 2022.

^c World Food Programme (WFP), *Jordan Country Brief, October 2022*.

^d ESCWA calculations based on Palestine's Household Expenditure and Consumption Survey, 2016–2017.

^e Hossain, S.M.M., Leidman, E., Kingori, J. and others, *Nutritional situation among Syrian refugees hosted in Iraq, Jordan, and Lebanon: cross sectional surveys, 2016*.

^f ESCWA calculations based on Palestine's Household Expenditure and Consumption Survey, 2016–2017.

^g Sweetmavourneen Pernitez-Agan, Kolitha Wickramage, Catherine Yen and others, *Nutritional profile of Syrian refugee children before resettlement, 2019*.

acute food insecurity during 2021.¹⁰⁵ Conflicts inflict a heavy toll on all aspects of human welfare, including destroyed livelihoods, loss of assets, and disruption of logistical networks that lead to extreme levels of food insecurity. At the same time, food insecurity is a major cause of conflict in Arab countries. The spike in global food prices in 2007–2008, for example, sparked rioting in multiple areas. High food import dependency makes the Arab region especially vulnerable to disruptions in international food trade and is thus a potential source of social unrest.

This relationship between food insecurity and conflict is, in turn, strongly linked to inequality, as poorer populations experience the effects of food insecurity the most. Breisinger and others (2014) show that households are more likely to participate in conflict if they both face adverse socioeconomic conditions and experience discrimination or inequality. To increase resilience to conflict, Governments should invest in policies that ensure food security and address structural inequalities. As stated by United Nations Secretary-General António Guterres: “If we do not feed people, we feed conflict”.

C. Food security outcomes

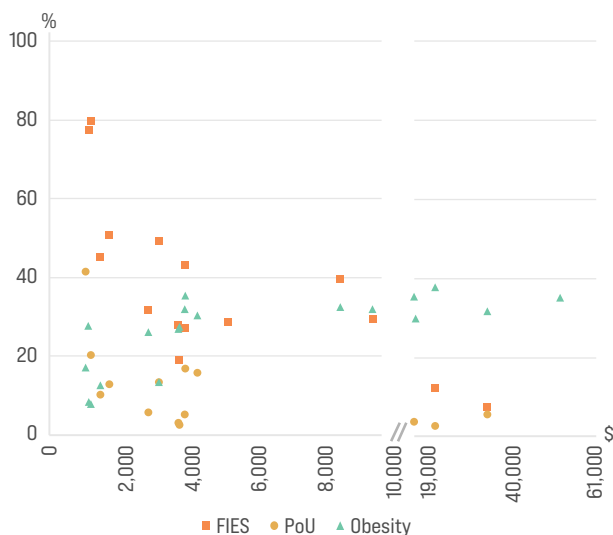
The previous sections show that to achieve food security, countries should have sufficient food available; the population should have physical and economic access to it; and it should be consumed in a safe way and in the right quantity and quality. In addition, all this should happen at all times, regardless of external shocks. Inequalities in the four pillars identified in the previous section lead to very different degrees of food security among countries, among households, and within households. These effects can be quantified through three key indicators: undernourishment levels, obesity levels, and households' perceptions of food insecurity, measured through the Food Insecurity Experience Scale.

The Arab region is characterized by severe inequalities in access to quality nutritious food; 33.3 per cent of the population are food insecure and 28.4 per cent are obese. Additionally, 9.3 per cent of the population – about

53 million people – are suffering from undernourishment and are in urgent need of food aid and comprehensive social protection policies.

At the country level, there are large disparities in nutritional outcomes between groups of countries. Figure 23 shows how food security outcomes affect countries with different levels of GDP per capita. Undernourishment and food insecurity are more apparent in LDCs and countries in conflict. Undernourishment rates are particularly high in Somalia (53.1 per cent) and Yemen (41.4 per cent) and food insecurity is as high as 79.7 per cent in the Comoros, 77.4 per cent in Somalia and 50.7 per cent in the Sudan. In recent years, undernourishment and food insecurity have also been increasing in MICs that have a high number of refugees, as is the case in Jordan and Lebanon. In Jordan, undernourishment rates increased from 6.2 per cent in 2010 to 16.9 per cent in 2020.

Figure 23. Distribution of the prevalence of undernourishment (2020), the Food Insecurity Experience Scale (2019–2021) and obesity rates (2016) by gross domestic product per capita (2021)



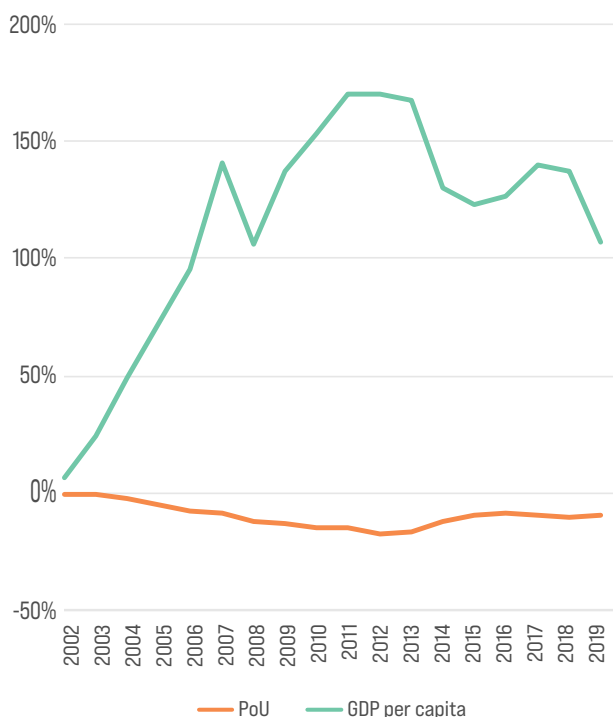
Source: ESCWA calculations based on FAOSTAT data.

Note: FIES refers to the Food Insecurity Experience Scale and PoU refers to the prevalence of undernourishment.

Obesity is more prevalent in both middle- and higher-income countries than in LDCs. The highest obesity rates in the region are found in GCC countries, with an average of 34.1 per cent in 2016. Countries such as the Comoros or Somalia present obesity rates under 10 per cent. Similarly, overweight children of 0–59 months old are more prevalent in middle-income than in LICs. Egypt, Lebanon, Libya, the Syrian Arab Republic and Tunisia presented obesity rates in infants above 15 per cent in 2020, considered very high by World Health Organization (WHO) standards. Mauritania, Somalia and Yemen had under 3 per cent prevalence of overweight children.¹⁰⁶

At the household level, undernourishment and food insecurity are most often found among the poor and most vulnerable population groups. Macroeconomic variables can offer some insights on the relationship between income inequality and food insecurity outcomes. Comparing GDP growth in the Arab region with the evolution of undernourishment rates shows that increases in wealth have not translated into reductions in undernourishment. While GDP per capita has more than doubled in the region since 2001, undernourishment has decreased by only 1 percentage

Figure 24. Percentage changes in gross domestic product per capita and prevalence of undernourishment in the Arab region from baseline 2001 levels

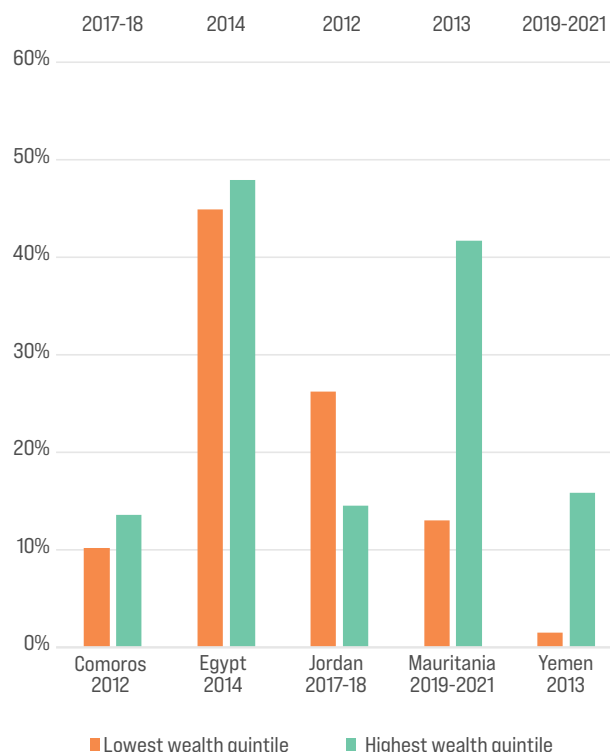


Source: ESCWA calculations based on World Bank data.

point, as illustrated in figure 24. Inequality dynamics result in economic benefits being enjoyed by only few and not reaching the lower-income deciles of the population, thus keeping undernourishment levels stagnant. While, in part, this can be explained by inequalities between countries – with undernourishment levels increasing in Jordan, Lebanon and Yemen while decreasing in Djibouti and the Sudan – most countries have experienced much higher rates of GDP per capita growth than reductions in the prevalence of undernourishment (PoU).

The relationship between obesity and income inequality is more complex. Some studies suggest that obesity rates are higher among wealthy households and urban populations in LICs, and that as countries’ incomes increase, obesity rates shift to poorer populations and rural areas.¹⁰⁷ Following that hypothesis, obesity rates in Jordan are higher among the poor, while in Mauritania and Yemen, obesity is more prevalent among the wealthy, as illustrated in figure 25.

Figure 25. Women’s obesity rates per wealth quintile and country



Source: ESCWA elaboration based on the Demographic and Health Surveys (DHS) Program data.

Within households, we observe important nutritional differences in relation to gender. In all countries in the Arab region, obesity rates are higher for women than for men, with Egypt, Tunisia and Algeria presenting the biggest disparities.¹⁰⁸ Some households experience malnutrition with obesity and undernutrition coexisting in the same family unit.

Food insecurity is one of the cruelest forms of inequality, directly affecting the basic human rights and dignity of those who are suffering from it. As stated by the United Nations High Commissioner for Human Rights, Louise Arbour, “Where hunger and malnutrition persist, there can be no justice or security. A just and secure world is one where every woman and man – every girl and boy – can live in dignity, without wondering where the next meal will come from”.

Food security and inequality: risk and trend analysis

03



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



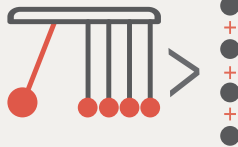
The number of people suffering from severe food insecurity in 2021 was estimated at 53.9 million, an increase of 5 million from the previous year.

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

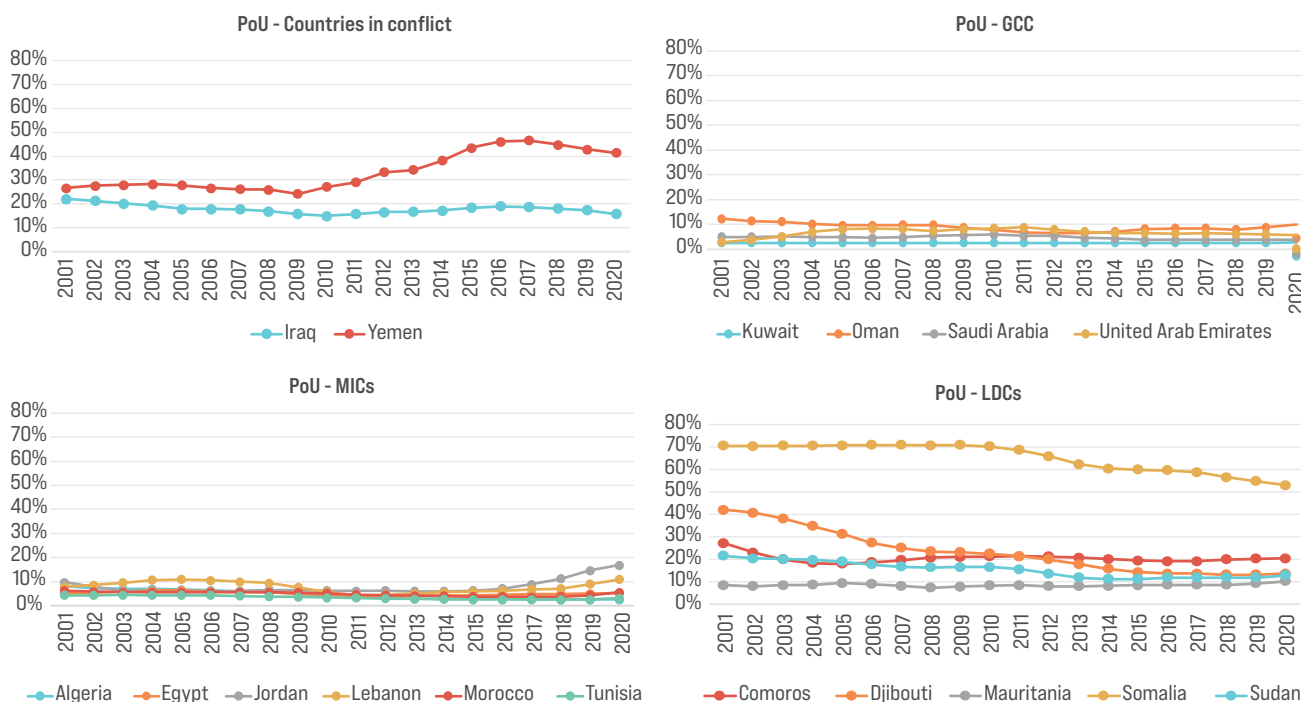
food security trends between 2000 and 2020, followed by an assessment of different economic, political and environmental shocks experienced by Arab countries in the 2020–2022 period, for which data on food security are limited. It presents preliminary data on the unequal outcomes of the shocks among 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



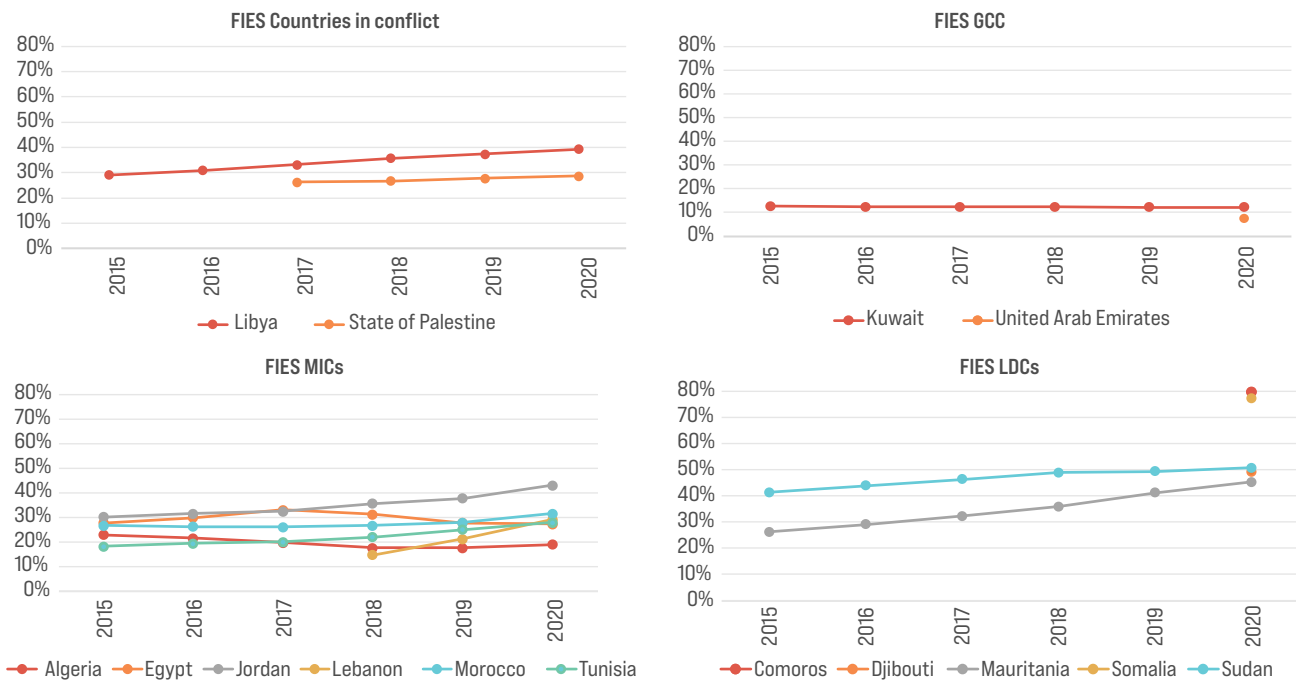
Source: FAOSTAT.

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

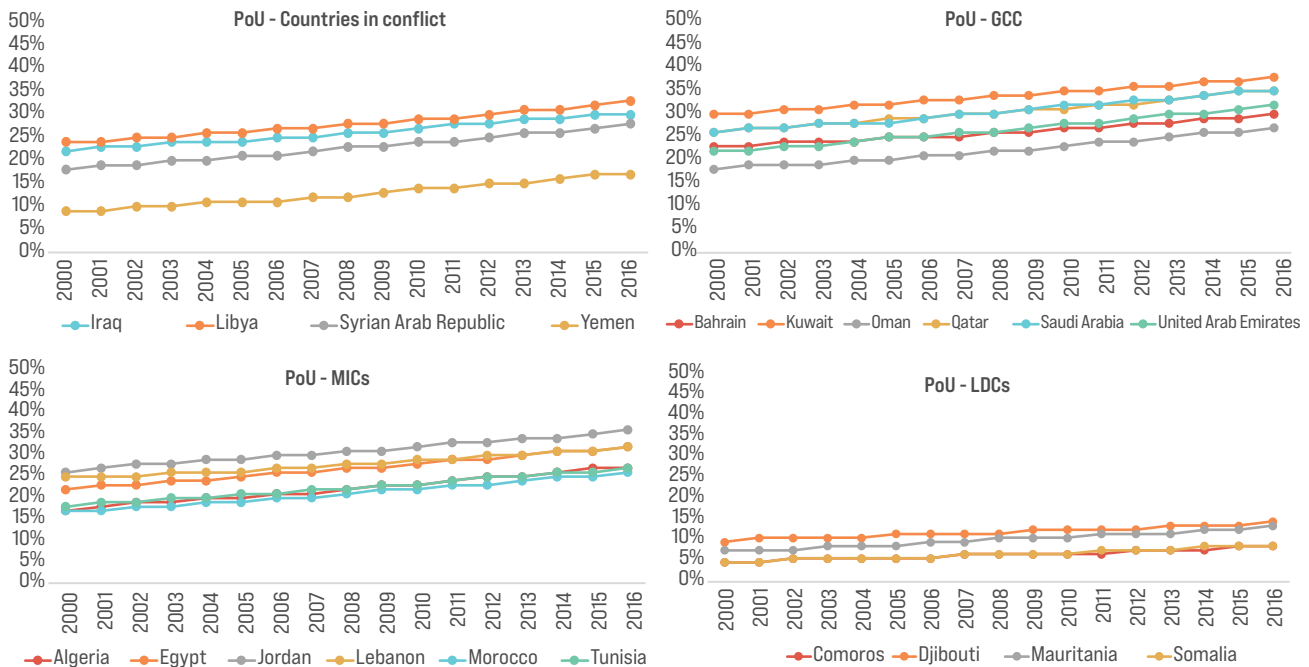
Obesity rates have been increasing in all countries in which data are available, reflecting changes in traditional diets and a lack of awareness of healthy nutritional practices. In general terms, obesity levels remain low in LDCs while they are high and rising in GCC countries and MICs. Countries in 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



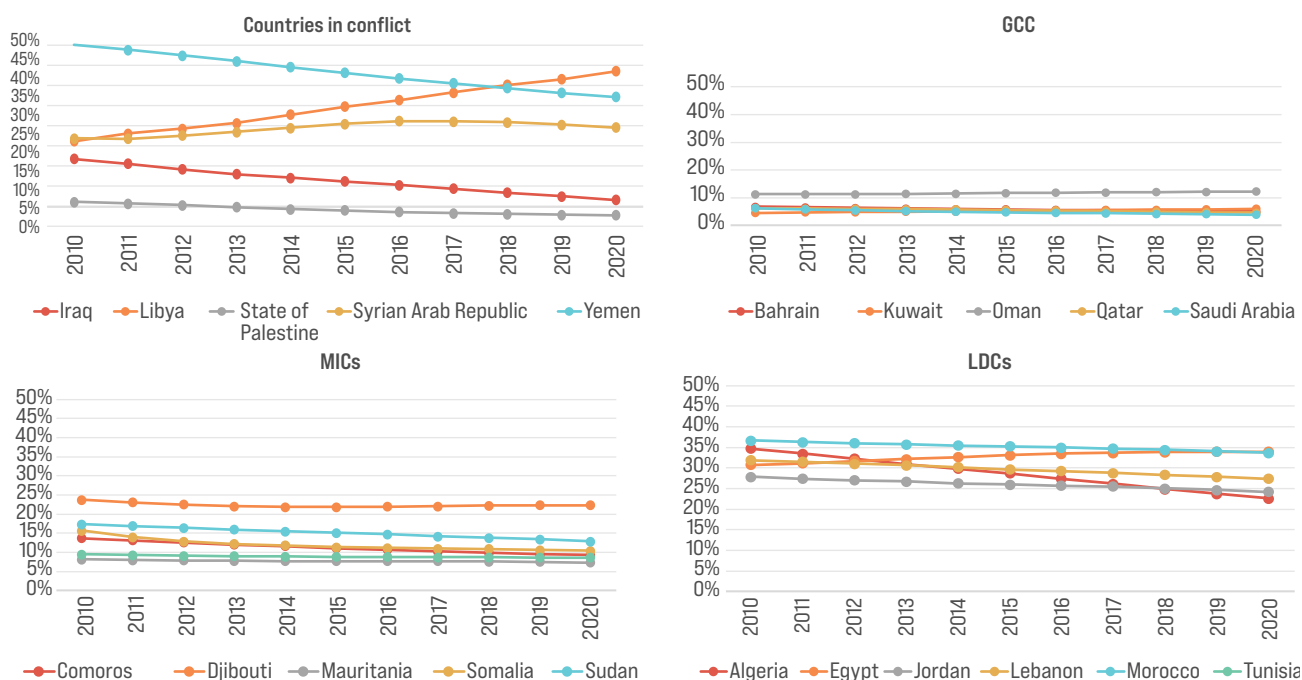
Source: FAOSTAT.

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 unprecedented 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 heat¹²⁷ 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

Country	Economic shocks				Political shocks and conflict	
	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		71	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 country 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 cent¹⁴³ 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

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.

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 km² 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.

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 km²) 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 northern, 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 2020¹⁶⁹ 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 disproportionately 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.

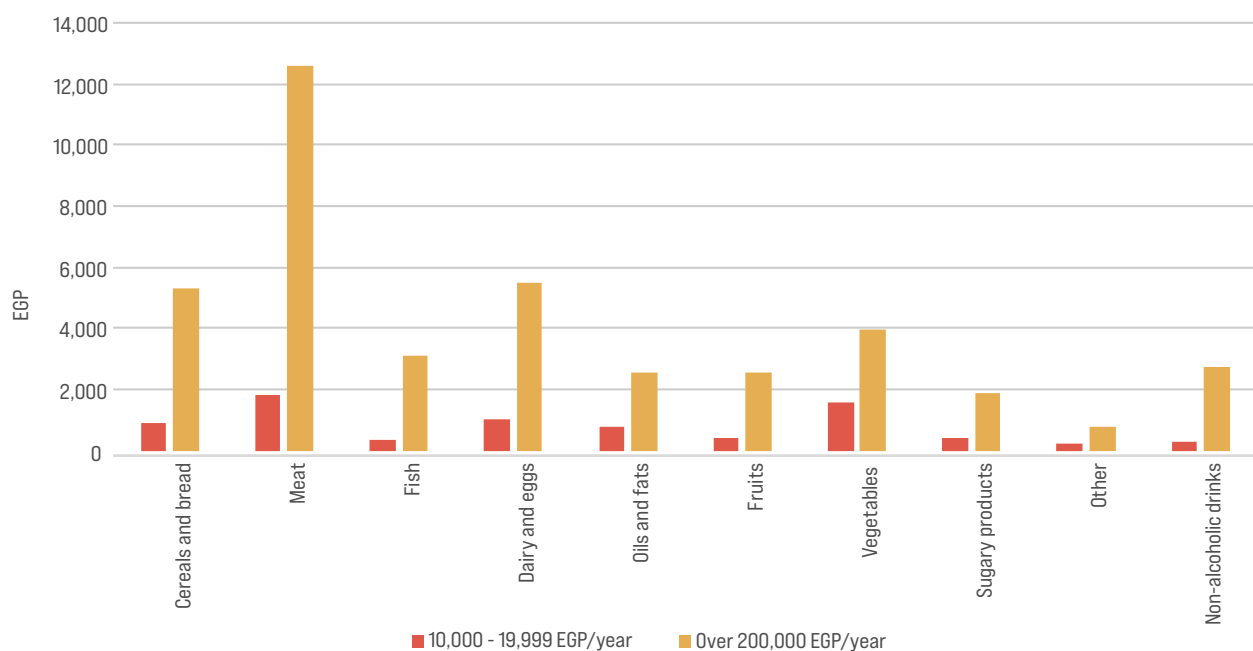
Following the regional trends, we find substantial inequalities in consumption outcomes. In 2020, households in the highest expenditure group had an overall yearly expenditure 15.8 times higher than some of the poorest households (spending 10,000–19,999 EGP/year). Similarly, urban populations spent 30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

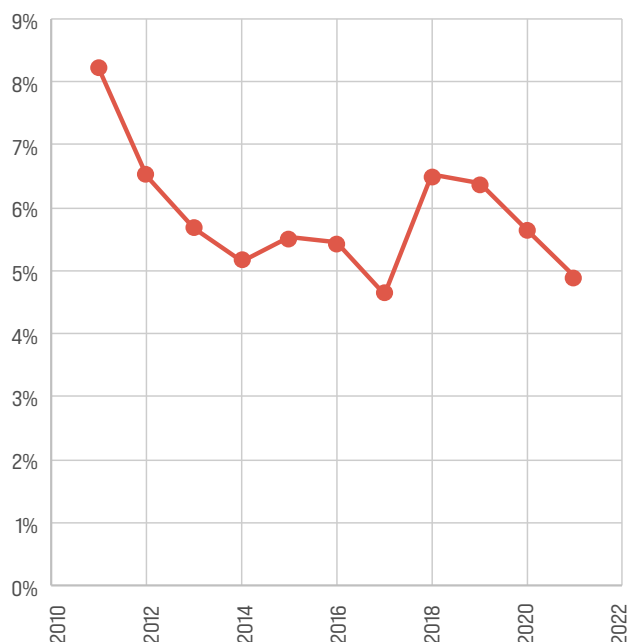
In the near future, growth is predicted to slow down.¹⁷⁷ Meanwhile, the increased cost of living represents a significant risk for poor and middle-class households, who spend a higher share of their budget on food compared to wealthier households. A 2022 International Food Policy Research Institute (IFPRI) 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 disproportionately 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 employed¹⁸⁸. 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 Bank¹⁹⁵ 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

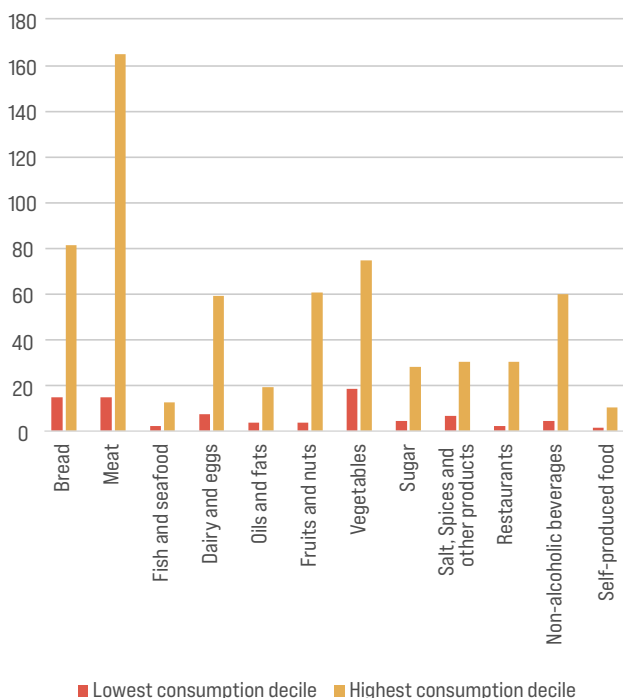
markets. Following the war in Ukraine, the State of Palestine experienced a 25 per cent increase in the cost of food staples,¹⁹⁸ exacerbating food insecurity among poorer families.

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.

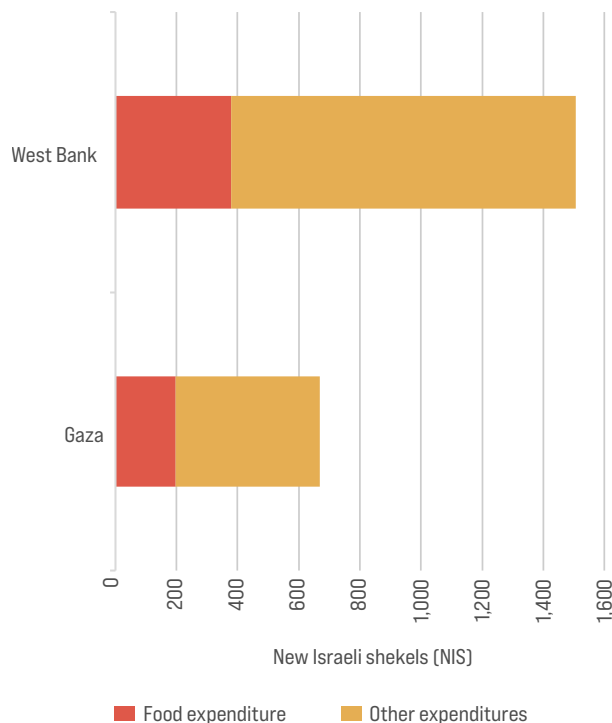
Classifying households according to their per capita total consumption, we observe that in 2017 the wealthiest decile had a total expenditure 13 times higher than the poorest decile. In terms of food, the wealthy spent almost

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

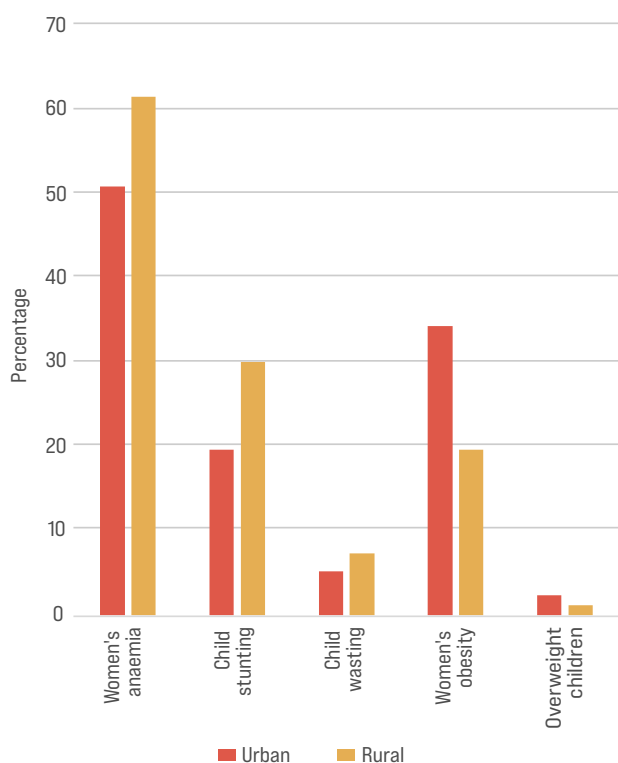
Source: ESCWA calculations based on the Palestinian Household Expenditure and Consumption Survey 2016–2017.

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 deserts 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

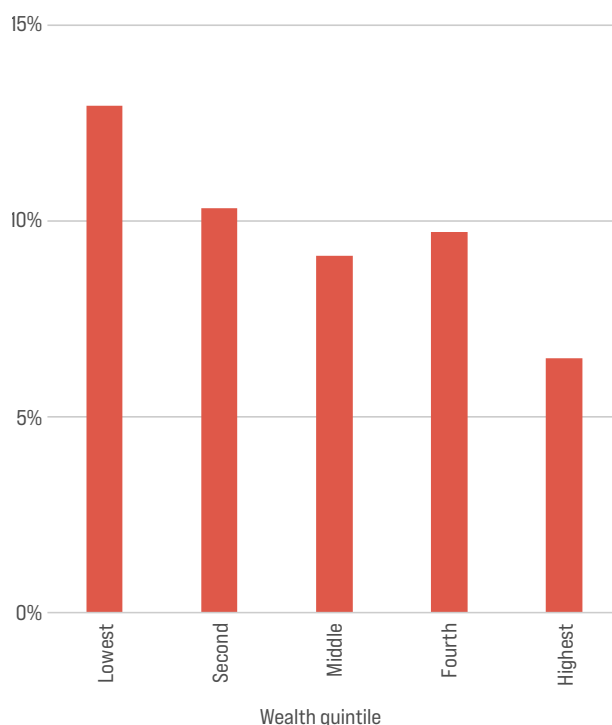
The high economic inequalities are reflected in food security levels. The country suffers from high levels of food insecurity and high levels of obesity, with trends showing that inequalities are intensifying. In 2020, undernourishment rates reached 15.9 per cent, up from 15 per cent in 2010.²⁰⁹ Obesity 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

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



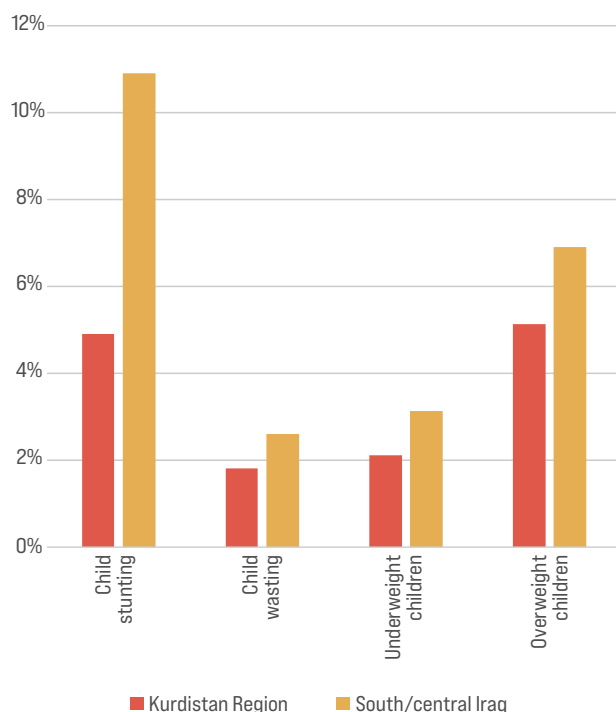
Source: ESCWA elaboration using data from the Multiple Indicator Cluster Survey, Iraq, 2018.

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.

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.

Policy
solutions

04



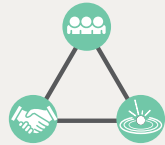
Key messages

01



A combination of integrated policies is required to reduce inequality.

02



To reduce inequality in food security, a three-pronged approach is needed: promoting solidarity, delivering visible impact, and securing credibility and trust.

03



Immediate provision of development and humanitarian assistance, without political implications, should be a priority to ensure that nobody suffers from food insecurity.

04



A solidarity fund should be established to facilitate shared responsibility between the rich and those living in poverty.

05



Redistribution should finance social protection systems, which should be designed to break intergenerational inequalities through providing assets, educations, skills and access to opportunities.

06



National nutrition strategies can improve the population's access to nutrition and increase awareness of health eating and exercise practices.

07



Rural development and agricultural development go hand in hand.

08



Early warning systems, disaster management units, and climate change mitigation and adaptation can protect against the growing impacts of climate change.

Policy solutions

04



Economic growth alone cannot achieve food security. In the absence of integrated policy solutions, inequality dynamics can cause vulnerable population groups to continue to suffer from poverty and food insecurity.

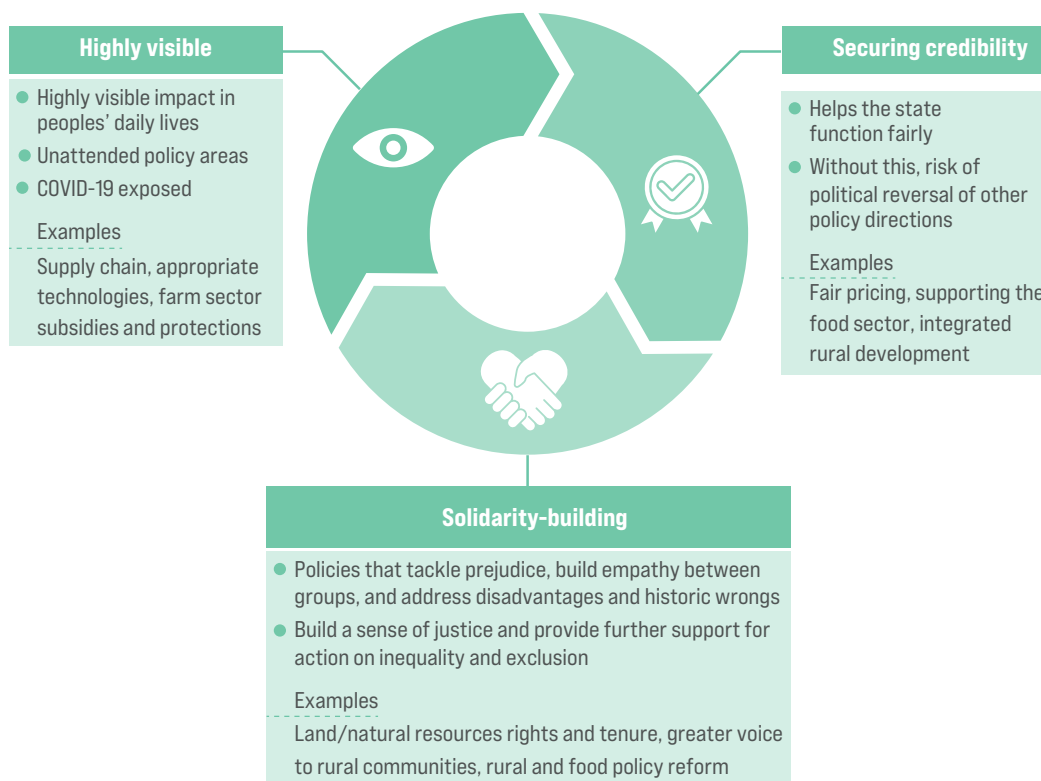
A. Introduction

Applying an inequality lens to food security should lead to the development of policies that ensure a healthy diet is available, accessible and sustained for all members of society, irrespective of their gender, socioeconomic status or geographical location. Economic growth alone is not sufficient to reduce inequality and ensure food security. On the contrary, economic growth that does not trickle down to the entire population will widen inequality. For example, profit-driven food systems risk leaving vulnerable stakeholders food insecure, particularly small-scale farmers, transporters, wholesalers, vendors, retailers and supply chain workers, as well as consumers.²¹⁸

This chapter builds on Pathfinders' three-pronged approach for policies to successfully reduce inequality as presented in figure 37: (a) delivering visible impact; (b) promoting solidarity; and (c) securing credibility and trust. To deliver visible impact, policies should tackle areas that

make a meaningful, material difference in people's daily lives and address unattended policy areas. To promote solidarity, policies should tackle prejudice, build empathy between groups, and address disadvantages and historic wrongs. Finally, to secure credibility and trust, policies should enable institutions to function fairly and transparently. Whilst policies focused on just one of the three prongs may be effective in reducing inequality in food security in the short-term, action across all three prongs is essential to ensure sustainability. Table 8 details the policy recommendations under the four pillars of food security, availability, accessibility, utilization and stability, using the three-pronged approach.

In the short-term, immediate provision of development and humanitarian assistance, especially in countries in conflict, least developed countries and those undergoing environmental and/or economic crises, is needed to ensure

Figure 37. A three-pronged approach to policies to reduce inequality

Source: Pathfinders, From Rhetoric to Action: Delivery Equality and Inclusion, 2021. .

access to basic food for the most vulnerable. This should be a priority to ensure that nobody suffers from food insecurity and that the population's short-term needs are met.

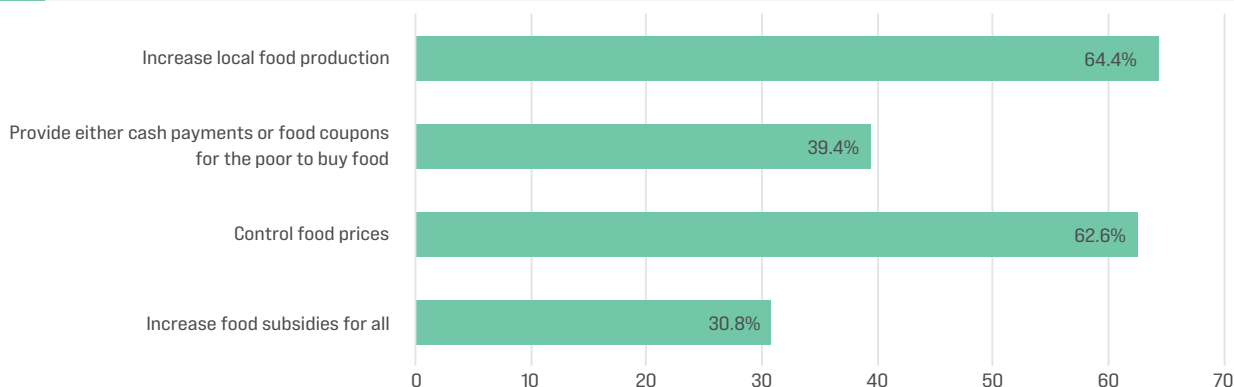
In the medium term, progressive fiscal policies, trade facilitation, comprehensive social protection, increased agricultural and infrastructure investment, and support to small-holder farmers can all contribute towards reducing inequalities and ensuring food security. This would ensure a fair redistribution of wealth and potentially alleviate food insecurity and reduce inequalities to ensure that no one is left behind.

In the long term, food security-enabling trade policies and sustained national and regional development will go a long way towards enhancing regional food security and self-sufficiency, thereby reducing the region's exposure to food shocks while driving greater equality, stability and security.

ESCWA conducted a poll on food security asking about the role of the Government in combating rising food prices. As figure 38 shows, the majority of respondents believe that Governments should control food prices and increase local food production.

This chapter provides policy recommendations for achieving equality in food security. All solutions adhere to the principles of (a) delivering visible impact; (b) promoting solidarity; and (c) securing credibility and take into account the four main pillars of food security.

Figure 38. People’s perceptions of Governments’ policy solutions to address recent increases in food prices



Source: Results of ESCWA online opinion poll.

Table 8. Policy solutions to address inequalities in food security

Pillars of food security	Existing inequalities	Policy solutions		
		Delivering visible impact	Promoting solidarity	Securing credibility
Availability	Unequal per capita calorie supply	Support agriculture: <ul style="list-style-type: none"> Deliver extension and advisory services to smallholder farmers Support agricultural cooperatives Embrace innovative technologies Finance smart irrigation techniques Unlock the potential of rain-fed agriculture Facilitate food trade: <ul style="list-style-type: none"> Ensure preferential trade for perishable goods Support fast and reliable testing procedures for agricultural trade 	Support agriculture: <ul style="list-style-type: none"> Support youth agricultural initiatives Facilitate food trade: <ul style="list-style-type: none"> Promote regional trade integration 	Support agriculture: <ul style="list-style-type: none"> Ensure an efficient outcome for public investment in agriculture Address food losses and waste Facilitate food trade: <ul style="list-style-type: none"> Digitalize trade and customs procedures
	Unequal ability to produce food			
	Unequal ability to import food			
Access	Unequal capacity to acquire food due to economic constraints	<ul style="list-style-type: none"> Review food subsidies Adopt comprehensive social protection systems Provide free school meals Implement cash transfer schemes 	<ul style="list-style-type: none"> Create a regional solidarity fund Invest in education 	<ul style="list-style-type: none"> Implement progressive taxation Coordinate policies: avoid duplication, inefficiencies and contradictory outcomes
	Unequal capacity to acquire food due to physical constraints			
Utilization	Unequal access to clean water and sanitation	<ul style="list-style-type: none"> Develop national nutrition strategies and guidelines 	<ul style="list-style-type: none"> Invest in infrastructure 	<ul style="list-style-type: none"> Improve food control systems Provide incentives for healthy food consumption
	Unequal consumption of sufficient and nutritious food			
Stability	Unequal vulnerability to climate, economic and political shocks and ability to recover	<ul style="list-style-type: none"> Invest in nature-based solutions Finance climate-smart agriculture 	<ul style="list-style-type: none"> Increase humanitarian financing Mainstream climate change adaptation and mitigation across fiscal policies 	<ul style="list-style-type: none"> Enhance disaster management Increase transparency in humanitarian assistance

B. Enhancing availability

The recommended solutions to enhance availability of food focus on two solutions related to supporting the agricultural sector and facilitating food trade.

1. Supporting the agricultural sector

a. Delivering visible impact

Deliver extension and advisory services to smallholder farmers: Extension services play a crucial role in ensuring the most remote and vulnerable farmers are also productive and thus should be prioritized, with the support of grassroots organizations and rural cooperatives. Good extension services can reduce inequality among farmers and support poverty alleviation through higher productivity and therefore increased farm income.

Building comprehensive extension systems will provide farmers with the necessary technical know-how, inputs

and other support needed, including enhancing their financial literacy and business development capacity.

Support agricultural cooperatives: Agricultural cooperatives combat inequality by enabling farmers to share risks, reduce input and transportation costs, and share best practices, and by reducing the role of middlemen, providing access to a greater market, and ultimately increasing their profitability. By being grouped into cooperatives, smallholder farmers can reap the fruits of economies of scale and more easily access dedicated agricultural support, markets and financial services, enabling them to increase their national, regional and ultimately global competitiveness.

Embrace innovative technologies to boost agricultural productivity: Appropriate agricultural technology and practices have the potential to transform the agricultural sector, increase productivity and reduce losses and costs. These technologies and practices, including improved seeds, adapted machinery, fertilizer use, cropping patterns, water use and management, and weed and pest management, help to maximize crop yields while ensuring seasonal and yearly stability. Improved seeds (for example, drought-resistant seeds) or improved farming techniques, can increase crop yields and resilience. Advanced technologies, such as mobile applications, can further enhance resilience, particularly by increasing coordination between local farmers and vendors or retailers or when paired with financial services to facilitate access to agricultural credit and farm insurance. Appropriate technology and practices can significantly improve equitable distribution of gains from farming activities and ultimately increase farm income.

Governments should set up an appropriate incentive system to support the uptake of innovative agricultural technologies and practices such as providing concessional agricultural microcredit.

Finance smart irrigation techniques: Smart irrigation techniques can support climate change adaptation and increase the resilience of ecosystems. Not only does

An innovative solution for farmers in Morocco

In order to help farmers decrease their emissions and increase their profits and resilience, a Moroccan woman entrepreneur created Biodôme du Maroc. The company builds and installs tanks on small farms, collecting and fermenting organic waste to create biogas and compost, which cover farmers' energy and fertilizer needs. Benefits include reducing greenhouse gas emissions, generating energy within the farms, waste treatment and the provision of additional income such as through selling organic fertilizers.

Source: SwitchMed Magazine, [Morocco](#), 2018.

Between 2008 and 2018, the Arab region became over 4 per cent more water-stressed due to population growth and climate change. Innovative water use and management systems should be adopted urgently within the agricultural sector as the largest user of scarce water.

Source: United Nations, *The United Nations World Water Development Report 2023: Partnerships and cooperation for water*, 2023.

smart irrigation save scarce water resources, but it also maximizes agricultural yields by providing the water level needs for different crops. By enhancing water conservation, smart irrigation systems promote better water sharing among upstream and downstream farmers and across economic sectors.

Governments should engage financiers and technology providers to ensure availability and favourable financing for smart irrigation techniques.

Unlock the potential of rain-fed agriculture: Irrigated farming systems are expensive to set up and maintain; rain-fed farming systems are a better solution for increasing food production in an affordable manner. Unlocking the potential of rain-fed agriculture in this increasingly water-scarce and drought-prone region is of the utmost importance. This could be achieved with the adoption and expansion of supplementary irrigation, which helps reduce the impacts of dry spells on crops at critical times. Rain-fed farmers are usually the poorest and unlocking the potential of rain-fed farming systems could significantly alleviate poverty and food insecurity in rural areas.

Rain-fed farm productivity could be increased sustainably through the use of supplementary irrigation, including by building small-scale rural infrastructure to harvest rainwater or to reallocate surface water or groundwater.

b. Promoting solidarity

Support youth agricultural initiatives: Young people tend to favour modern technology and practices across the agriculture value chains that can revitalize agricultural systems, increase productivity and enhance food security. Supporting youth agricultural initiatives can bring positive changes to food security while empowering an age group that suffers from compound inequalities. Support to youth agricultural initiatives should focus on overcoming the major constraints young people face in access to land, finance and skills development.²¹⁹ Young people are confronted with serious social, economic, political and environmental challenges largely inherited from previous generations, which are more acute in rural areas and in agriculture.

Governments and donors need to implement capacity-building and awareness-raising programmes to support young people, enact policies to strengthen their land tenure and rights, provide capacity-building in enterprise development and financial literacy, and develop profitable and sustainable projects. The provision of access to farmer field schools or youth skills development programmes is also needed.

c. Securing credibility

Ensure the efficiency of public investment in agriculture: It is important to ensure that public agricultural investments reach the most vulnerable farmers and stakeholders and reduce inequalities across food systems. For example, large irrigation schemes might benefit large farms while not reaching smallholder farmers, and thus increase existing inequalities. Instead, Governments could invest in small irrigation infrastructure, local storage systems, other utilities and feeder roads that benefit the largest number of farmers. These investments would also encourage local private sector development²²⁰ and support job creation across the agricultural value chain in rural communities if farmers were to use locally produced equipment and materials. Agricultural development and rural development go hand in hand.

Address food loss and waste: Food loss and waste impact the entire food system as they result in natural resource wastage and increase the impacts of climate change. They also impact food security through reduced food availability and increased costs, thereby further worsening inequalities.

Circular economy initiatives to address food loss in Algeria and the State of Palestine

Hebron in the State of Palestine connects a vegetable market to a compost facility. The waste from the market goes directly to compost and creates organic fertilizers for local farmers.

Rima Dates, an Algerian date company, buys low-grade dates, which account for 60 per cent of the total production but are frequently undersold, and transforms them into new products such as chocolate bars from the flesh, oil for cosmetics from the pits, and fuel from the remaining dry material. This zero-waste business model has so far saved 14 tonnes of low-grade dates, while providing new jobs and increasing local farmers' incomes.

Source: SwitchMed Magazine, *Algeria*, 2018; FAO, *Hebron: A unique and vegetable market linked to a compost facility*, 2018.

Governments need to invest in food logistics and other infrastructure to reduce food loss by addressing structural deficiencies at farm level and throughout the supply chain, including removing bureaucratic red tapes, and excessive taxes and regulations. At the retail level, food waste must be addressed through improved business practices, such as inventory and production management. At the consumption level, Governments should implement public awareness campaigns and reform policies that lead to food waste.

2. Facilitating food trade

a. Delivering visible impact

Adopt preferential trade agreements for perishable goods:

Perishable goods are particularly vulnerable to trade and customs delays due to their short lifespan. Smallholder

farmers producing perishable goods are more exposed to income shocks if their goods are delayed in transport and they have to charge a premium to cover this risk, resulting in higher prices of fresh foods for end consumers. This reduces the participation of small farmers in export markets where they could fetch higher prices for their commodities.

Governments need to ensure special treatment for perishable goods, including giving them priority at borders and preferential treatment so that they are processed quickly to reduce food losses and thereby increase farmers' profitability and reduce consumer prices for fresh foods.

Support fast and reliable testing procedures for agricultural trade: Inefficiencies in agricultural supply chains, such as multiple food tests, delays in food testing and stringent safety measures, lead to income losses for farmers and traders, notably the smallest and poorest that may have limited access to secure storage options, and create food losses and an unstable food supply system.

Countries must act to ensure fast and reliable testing procedures that are in line with regional and global standards. Arab countries need to prioritize the use of standardized regional tests and procedures to enhance intraregional trade.

b. Promoting solidarity

Promote regional trade integration: Regional trade integration can offer substantial economic gains through expanding markets, integrating food supply chains and increasing the competitiveness of the Arab region as a whole. One of the priorities should be reforming non-tariff measures and harmonizing regulatory frameworks; examples include phytosanitary and technical regulations, testing and certification, and adopting a common Arab Good Agricultural Practices framework.

Governments should promote a regional agricultural development programme whereby water scarce countries or those with limited arable land can invest in Arab countries with abundant land and water to increase the availability of food supplies at the regional level. Investment flows need to be regulated to maximize both economic and social benefits, while minimizing risks for

both investing and recipient countries. Although not its primary purpose, regional trade integration can also lead to non-economic benefits such as the promotion of peace and security, which would significantly reduce inequalities.

c. Securing credibility

Digitalize trade and customs procedures: The digitalization of trade procedures will quicken agricultural trade across borders, reduce the risk of human error, minimize opportunities for rent seeking, and encourage agricultural trade, thereby benefiting small farmers and consumers. In particular, e-payments can reduce customs clearance times and administrative costs and ensure government trade revenue transparency.

E-payment systems were further developed due to the need to stimulate cashless economies during the COVID-19 pandemic; Governments should consolidate the gains made and maintain momentum for furthering digitalization. To be successful at the regional level, it is important that e-payment procedures are interoperable across borders and payment providers.

An E-Trade Readiness Assessment in Jordan outlined concrete policy measures that, if effectively implemented, can fast-track the country's digital transformation.

A technology-savvy young population, relatively well-developed information and communication technologies and innovation sectors, a mature business environment regarding digital companies and start-ups, financing institutions, incubators, and accelerators supported by a myriad of local and international partners all contribute towards the growth of e-trade in Jordan. E-trade could enhance trade openness, which could impact living standards and reduce inequality.

Source: The United Nations Conference on Trade and Development (UNCTAD), [Jordan: eTrade Readiness Assessment, 2022.](#)

C. Enhancing access

1. Delivering visible impact

Review food subsidies: The use of food subsidies needs to be reviewed to ensure access to healthy and affordable food for the most vulnerable. Within the current regional and global economic context, blanket food subsidies, in particular for wheat, are increasingly costly. However, food subsidies represent a safety net for those living in poverty and lower middle-class segments of society. Unlike other types of subsidies, food subsidies reach the targeted poor population, as highlighted in the Egyptian case.

In the short term, countries need to enhance the efficiency of food subsidies and ensure that they reach vulnerable populations, minimize market distortions, and promote healthy diets. This can be achieved through the use of e-vouchers as they improve programme adherence. In the medium term, countries should aim

“Countries should reform and repurpose general universal subsidies towards temporary, better targeted programs for global food security and sustainable food systems, considering the key aspects of (i) efficiency, (ii) cost and fiscal sustainability, (iii) flexibility, (iv) administrative complexity, (v) equity, and (vi) strengthened resilience and sustainability.”

Source: IMF, Joint Statement by the Heads of the [Food and Agriculture Organization, International Monetary Fund, World Bank Group, World Food Programme and World Trade Organization on the Global Food and Nutrition Security Crisis, 2023.](#)

at improving governance and better implementation of social protection mechanisms and replace all blanket subsidies with savings re-allocated to further strengthen social protection programmes or launch development programmes targeting the most vulnerable.

Develop comprehensive social protection systems:

Social protection reform should ensure universal access to essential services, including social insurance against life-cycle risks (ill-health, old age) and targeted access to social assistance against poverty (basic income and other services), which are well-proven to reduce poverty, enhance well-being and reduce inequality.

To move towards realizing comprehensive social protection, Governments must set social protection floors and detail a standard of living that no individual will fall below, including: (a) access to essential health care; (b) basic income security, nutrition and access to education for children; and (c) basic income security for adults of working age and older persons. Table 9 presents the different forms of social protection required to mitigate against different stages of food insecurity.

Provide free school meals to vulnerable school children:

Free school meals help to keep children in school by easing the burden parents face to feed their families and thus reducing the risk that children leave school to help support their families. All too often for deprived households, free school meals can provide a child's only nutritious meal, which is crucial for children's psychosocial development. Free school meals are linked to higher educational outcomes, thereby not only benefitting immediate food security, but also longer-term intergenerational equality.

Governments, donors, non-governmental organizations (NGOs) and community-based organizations need to develop comprehensive programmes and systems to provide school meals regularly while encouraging procurement from local agricultural providers (including youth agricultural initiatives) so that school feeding programmes develop local agricultural markets and businesses, whilst also ensuring the nutritional integrity of school meals.

Table 9. Social protection and food security

Classifications	Stage	Appropriate interventions
Food insecure	Starvation	Relief interventions: provision of food and other basic needs For example: emergency and humanitarian aid programmes
	Acute hunger	
	Chronic hunger	
Vulnerable to becoming food insecure	Hidden hunger (semi- or inadequate nutrition)	Mitigation interventions and social protection to boost income and consumption and protect against consumption reduction For example: cash transfers, conditional cash transfers, vouchers, subsidies, Cash+
	Adequate intake but worry about future food access	Promotion of sustainable livelihoods For example: graduation programmes
Food secure	Adequate intake with sustainable future supply of food	Building resilience by promoting savings, assets and insurances to draw on in times of shortages For example: unemployment insurance

Source: Adapted from Hendriks L., *The food security continuum: a novel tool for understanding food insecurity as a range of experiences*, 2015.

In Tunisia, the Government recognizes school meals as a social safety net that can enhance stability and social cohesion, increase access to education and nutrition and contribute to human development. As such, World Food Programme (WFP) is working with the Government to enhance the Government-run national school meals programme and aims to reach 260,000 children in vulnerable situations (125,000 girls and 135,000 boys).

At the same time, WFP is decentralizing and diversifying its supply chain to enhance community resilience and programme sustainability.

Source: WFP, Tunisia Country Strategic Plan (2022–2025), 2021.

Implement cash transfer schemes to protect against short- and medium-term food insecurity: Targeted cash transfers protect the vulnerable from deprivations caused by poverty and food insecurity and are essential during crises such as natural disasters and conflicts. Successful cash transfer systems should be well targeted, large enough to enable recipients to meet their basic needs and should be responsive so that they can be quickly scaled up or down in response to a shock. Unconditional cash transfers are sufficient to mitigate immediate food insecurity, are less costly and are easier to implement. Conditional cash transfers help to reduce intergenerational poverty, inequality and food insecurity by promoting school enrolment and regular health check-ups for children, thereby increasing their access to opportunities later in life. Governments must adopt and implement targeted initiatives for the most vulnerable,

The FAO advocates for a special programme referred to as Cash+, which ensures that farm households not only obtain cash transfers, but also inputs, assets, training and the support they need to farm, herd, fish and diversify their livelihoods. This approach delivers more benefits in terms of food security, nutrition and income generation potential.

Source: FAO, Cash+ FAO's approach, 2017.

which can be combined with additional programmes such as the provision of productive inputs, assets, training and/or extension services.

2. Promoting solidarity

Develop a regional wealth solidarity fund: An Arab Wealth Solidarity Fund can address the impacts of multiple overlapping shocks across the Arab region such as those brought on by the COVID-19 pandemic, the energy and food price shocks resulting from the war in Ukraine, and the recent earthquake in the Syrian Arab Republic and Türkiye. The solidarity fund would tackle inequality by targeting the specific needs of the most vulnerable groups while also expanding the opportunities available to low-income households. Timing and impartiality are critical.

Governments must coordinate efforts to set up a regional wealth fund and ensure that resources can be quickly deployed to protect vulnerable populations where there is need without too much bureaucracy or government obstruction.

Increase public investment in education to 15–20 per cent of total public expenditure: Education is the greatest enabler of social mobility, and investment in quality education will go a long way to reducing intergenerational inequalities. The Arab region as a whole is a long way

“Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farmworkers can become the president of a great nation.”

Nelson Mandela

off meeting the principles of the Incheon Declaration on commitment to education,²²¹ which calls for countries to invest between 4 and 6 per cent of their GDP or between 15 and 20 per cent of their public expenditure on quality education systems.

Arab countries must act together to revisit their commitments and increase public investment in quality education. Increased spending on education must ensure that education systems are able to raise awareness on issues such as good nutrition and exercise.

3. Securing credibility

Roll out a progressive national taxation system focused on direct taxation: Countries with high inequality rates are three times more likely to face food insecurity compared to countries with low inequality.²²² Poverty, very often linked with high inequality, is frequently the biggest determinant of whether an individual will face malnutrition.

Progressive fiscal policy is essential to combating both inequality and food insecurity. Taxes and transfers are some of the most powerful instruments to reduce inequality, whereby wealthy individuals and corporations are made to pay their fair share of taxes. Indirect taxes and subsidies are typically regressive, benefiting the upper and middle classes that consume more than the poorest. Indirect taxes can be made more progressive if basic goods (for example, food and children’s clothes) are taxed at a lower rate than luxury goods.

“Unbelievable that I am not taxed”

Marlene Engelhorn, a 30-year-old German heir to a fortune thinks that what is needed is structural change to how billionaires are taxed. She advocates for tax policies that distribute the wealth and, subsequently, the power of rich people.

Source: Emma Bubola, *She's Inheriting Millions. She Wants Her Wealth Taxed Away*, The New York Times, October 21, 2022.

Governments must enact direct tax policies (for example, income or corporate tax) and social transfers that are progressive and promote equality by taxing more high earners or high-net-worth individuals and corporates.²²³

Coordinate policies to reduce duplication, inefficiencies and contradictory outcomes: A coherent commitment to reducing food insecurity and inequality reflected through coordinated interventions will build the trust of the public and enhance social cohesion. Coordinating policies can increase their efficiency, reduce the risk of duplication and improve the chances of combating food insecurity and inequality. Multiple solutions are required across a wide range of sectors including agriculture, finance, social protection, health, education, trade, climate change, environment, infrastructure, energy, water, rural development, and research and innovation. All too often, different government bodies and agencies may have different, and even contradictory, objectives. For example, an initiative from the Ministry of Agriculture to subsidize fertilizers can improve crop yields but might promote excessive fertilizer use, which can lead to undesirable outcomes affecting people’s health and the quality of water sources.

Governments should establish task teams or special coordination units that support greater coordination across various government bodies and units. These task teams need to be empowered to drive coordination between competing stakeholders and ensure that greater coordination and collaboration are equally beneficial for all parties concerned.²²⁴

Water scarcity is a key limitation for the agriculture sector in the Arab region.

ESCWA and FAO supported the establishment of a Joint Water-Agriculture Ministerial Council under the umbrella of the League of Arab States in 2019 and a Joint Technical Committee to coordinate regional policies that affect the water and agricultural sectors. The Committee developed guidelines on improved allocation of water resources for agriculture.

ESCWA supported cross-sectoral coordination by disseminating knowledge, enhancing capabilities, developing scientific tools, and promoting integrated and coordinated policies on food and water security, which would enhance the implementation of the SDGs.

D. Enhancing utilization

1. Delivering visible impact

Develop national nutrition strategies and guidelines:

National nutrition strategies and guidelines can be used to promote healthy diets and lifestyles across the population and reduce nutritional deficiencies amongst the most vulnerable. The programmes within this strategy can include nutritional education campaigns, greater access to sports and physical education, healthy school meals for vulnerable children, folic acid supplements for pregnant women, fortified foods and deworming campaigns.

Governments must enact laws and regulations on food nutrition strategies and guidelines as they affect people's food choices, and provide information on serving size, caloric content per serving and the nutritional value of products to help consumers make more informed dietary decisions. Currently, less than half of the countries in the Arab region have mandatory nutritional food labelling.²²⁵

2. Promoting solidarity

Increase public investment in infrastructure: Public investment in infrastructure, including in transport, communications, cold chain, water and sanitation, are key to reducing food loss during transport and storage and to promoting greater agricultural productivity

and smallholder profitability. Public infrastructure investments are particularly beneficial to smallholder rural farmers and farm workers, who often face multiple overlapping inequalities, exacerbated by their remoteness.

Investment in transport and communication infrastructure will support access to markets by reducing food transport time and costs, especially for rural farmers and agricultural workers. Similarly, investment in cold chain equipment will prevent food loss during transport. Public investment in infrastructure will also have a significant impact on reducing geographical inequalities and is associated with greater school attendance and uptake of medical services amongst rural populations.

Improvement in access to water will enable smallholder farmers to embrace smart irrigation practices (especially if combined with policies to increase technology adoption), which will improve yields and smallholder incomes. Rural and underserved communities will also benefit from investments in water and sanitation as greater access to clean water enables the safe handling of food and promotes improved food utilization, whilst greater access to sanitation improves health outcomes.

3. Securing credibility

Improve food control systems: As food safety hazards increase on a global scale, effective food control systems are more important than ever to protect consumers' health while ensuring fair practices in the food industry. Improvements should equally target critical elements of food utilization: (a) food law and regulations; (b) food control management; (c) inspection services; (d) laboratory services; (e) food monitoring; and (f) epidemiological data, information, education, communication and training.

To work efficiently, Governments must implement programmes and strategies to enhance food control systems, enact appropriate legal and policy instruments, devote sufficient resources, hire well-qualified professionals, and promote solid institutional frameworks.

Provide incentives to healthy food consumption: Increasing the affordability of healthy foods (or decreasing the affordability of unhealthy foods, for example through a sugar tax) can encourage healthier dietary choices.

Some countries in the Arab region have recently started implementing taxes on soft drinks (generally associated with type II diabetes), including Bahrain, Morocco, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Preliminary studies show that these programmes have largely been successful in reducing soft drink purchases.

Governments should enact and enforce laws that limit the amount of sugar, salt and processed food, or laws that determine food marketing (for example, limiting sugar advertisements for children). The accuracy, size and placement of nutrition labels can also limit people's uptake of unhealthy food choices and should thus be regulated by law.

E. Ensuring stability against economic, political and climate shocks

The Arab region suffers from long-lasting occupation and conflicts disrupting livelihoods and contributing to deep food insecurity. Instilling peace, enhancing political stability and ending occupation are key to achieving sustainable development and ensuring equality and food security in the Arab region.

1. Delivering visible impact

Invest in nature-based solutions for food security: Nature-based solutions are increasingly recognized as an efficient and effective way to build resilience against climate change at the community level, protecting biodiversity and limiting land degradation while creating immediate jobs and supporting the transition towards a green economy. Examples of nature-based solutions include the protection and restoration of forests, the conservation and restoration of wetlands and the creation of urban green spaces. Forest restoration, for example, can protect

farmers against both drought and floods. Planting more trees in agricultural areas can reduce evaporation and protect soil moisture during periods of drought, whilst during period of intense rainfall increased forest land can slow water runoff and absorb excess rainfall. Nature-based pathways could thus reduce desertification, particularly in the field of ecosystem rehabilitation and recovery, and

Nature-based solutions can provide one third of the climate mitigation needed to stay below 2 degrees Celsius by 2030.

Source: Griscom, B. and others, *Natural climate solutions*, 2017.

as a result would make more fertile lands available to grow crops, improve food security conditions and reduce inequalities in access to food.

Invest in climate-smart agriculture: By ensuring that agricultural practices mitigate climate change emissions (for which the agricultural sector is a large polluter) and adapt against the increasing impacts of climate change (against which the agricultural sector disproportionately suffers), climate-smart agriculture can increase agricultural productivity, reduce vulnerability to climate risks and shocks, and support global emission reductions targets.

2. Promoting solidarity

Increase financing to humanitarian agencies: Expansion and reallocation of funds to humanitarian agencies and local NGOs are needed to cater for the increased humanitarian crises that the region is facing. Humanitarian funds should not be politically driven nor earmarked for a specific country, but rather used to support the most in-need populations.

In Morocco, the Government is working with the World Bank and Agence française de développement to encourage young people to embrace climate-smart agriculture. Recognizing that young people in rural areas are particularly excluded and that they have the potential to reshape the agricultural sector by adopting new technologies and practices, the Morocco Green Generation Program-for-Results aims to provide agricultural extension services in climate-smart agricultural practices to 12,000 young farmers.

Source: World Bank, [Morocco Green Generation Program-for-Results](#), 2020.

In Yemen, funding constraints have pushed WFP to cut their ration distributions to vulnerable populations. As such, WFP rations now only provide 65 per cent of the standard food basket, or 1,100 kilocalories per person per day.

In the Sudan, the funding shortfall forced WFP to reduce its intervention from 165 localities to 45 localities in 2022. This affected 783 of its nutrition centres and increased the risk of severe malnutrition and potentially death among 50 per cent of the current 1.7 million children and pregnant and breastfeeding women that WFP supports.

Source: WFP, [WFP Global Operational Response Plan: Update #7](#), 2023; WFP, [Yemen Food Security Update](#), 2022; and WFP, [Sudan Country Brief](#), 2022.

In countries facing multiple crises (as discussed in chapter 3), including economic, political and environmental crises, Governments have limited capacity to guarantee access to food for the most vulnerable. In such circumstances, the role of humanitarian organizations is paramount.

The private sector should also play an active role in supporting humanitarian organizations.

Mainstream climate change adaptation and mitigation across fiscal policies: Inequalities in climate change compound inequalities in income and wealth. Not only do the most vulnerable suffer the most from the impacts of climate change, but they are also the smallest contributors to climate change. It is therefore imperative that fiscal policies mainstream climate change mitigation and adaptation. This will require providing incentives to discourage emissions and encourage emission reductions. Taxes and transfers are powerful mechanisms for encouraging emission reductions. However, polluters will need to be taxed sufficiently to discourage their status quo and there need to be sufficient incentives for

the private sector to embrace clean energy alternatives. The additional revenue sourced from taxing carbon emissions (and other pollutants) must then be spent well. Emissions revenue could scale up social protection frameworks, increase investments in green energy or finance environmentally friendly businesses to increase their sustainability.²²⁶ To be effective in reducing inequality, climate policies and taxes must target the biggest polluters first.

Combating climate change can reduce inequalities beyond access to food. Investing in renewable energy rather than in fossil fuels, for example, would increase access to affordable electricity for those who are currently excluded or cannot afford to pay for electricity, while at the same time creating more jobs in the private sector.²²⁷

3. Securing credibility

Enhance disaster management to respond to unexpected shocks: Natural and human-made disasters can very quickly widen inequality and erode food security, particularly for the most vulnerable. Climate change increases the risk of natural disasters and thus can exacerbate inequality and food insecurity.

Consequently, disaster risk management is essential to mitigate the negative impacts of unexpected shocks on people's livelihoods.

Effective disaster risk management comprises prevention, preparedness, response and recovery.

Effective disaster risk management is critical to preventing unexpected shocks from permanently affecting vulnerable households, preventing widening inequality, and protecting food security and agricultural lands. To be effective, disaster risk management needs to be managed by a central body and coordinated across all levels of Government, the private sector, NGOs, civil society and communities.

Increase transparency in humanitarian assistance: Governments that receive humanitarian funds must effectively, efficiently and credibly use the resources available to them to provide immediate food or cash assistance to the affected populations. To ensure credibility, there must be transparency over funds received, who the donors are, how the funds are spent (including any procurement beneficiaries), and who the beneficiaries are.

Despite being highly exposed to droughts and other risks, Mauritania is one of the few countries in the Sahel region that does not have an institutional mechanism in place to tackle shocks affecting food security and nutrition. Emergency responses continue to be financed, planned and delivered in an ad hoc way, causing delays and generating inefficiencies in the allocation of resources.

The Government of Mauritania is working with the European Union to develop a fully functioning early warning, preparedness and response planning mechanism for food security and nutrition. A strong and reliable Government-led national scheme has been established, linking early warning, preparedness, planning and response to shocks affecting food security and nutrition in Mauritania. Community sentinel sites have also been established to ensure real-time monitoring of livelihoods, food security and nutrition.

Source: European Commission, *Disaster Preparedness: A Compendium of Experiences*, 2020.

Annexes



Annex 1.

Multiple crises matrix methodology

Rationale for the selection of indicators and thresholds

The multiple crises matrix presented in this report draws inspiration from Pathfinders' work in "An Age of Crises", by which countries are categorized according to the number of shocks they have experienced in recent years. This is combined with the Economic and Social Commission for Western Asia (ESCWA) Food Security Monitoring Framework to classify shocks affecting food security as economic, political or environmental. The indicators presented in each category have been selected on the basis of their relevance to the region and time period and considering data availability. While this matrix only presents an overview of the crises experienced, the discussion in chapter 3 of the present report sheds some light on how multiple crises reinforce each other.

For this exercise, shocks that affected the Arab region during the years 2020, 2021 and 2022 have been focused on. Some long-term processes, such as climate change effects or decades-long conflicts, continue to affect countries' development in general and food security in particular. Some of these processes and their relationship to food security inequality are discussed in chapter 2. The multiple crises matrix, however, aims to identify short-term shocks that help to explain the deteriorating food security situation in the region over the last three years, for which data are limited.

Economic indicators. Considering the Arab region's unique challenges as well as the changes in the global economy brought on by the COVID-19 pandemic and the war in Ukraine, four variables have been chosen by ESCWA to assess countries' economic situation during the 2020–2022 period.

- **Inflation.** Price increases, captured by the inflation rate in the 2020–2022 period, are a particularly

serious challenge for developing countries and poorer households and contribute to increasing inequalities in access to food. Developing countries absorb global price changes faster due to their shorter supply chains. Poorer households then spend a larger percentage of their income and have a lower ability to buffer the rising cost of living through savings or borrowing. The thresholds for inflation alerts have been set to 33 per cent for an amber alert and 50 per cent for a red alert. A 33 per cent inflation rate in the 2020–2022 period would be equivalent to average inflation of 11 per cent per year. Inflation rates beyond 11 per cent are considered moderately high even for developing economies.²²⁸

- **Foreign currency reserves.** Given that most countries in the Arab region depend on imports to ensure sufficient food availability, maintaining sufficient foreign currency reserves is key. Amber alert is categorized as having the ability to sustain less than six months of imports, while having reserves for less than three months is considered a red alert.
- **External debt.** Some countries are experiencing debt stress. As discussed in the chapter 1, debt in the Arab region has been growing steadily over the last decade and recent global events have exacerbated the situation. Debt, however, is key for development finance and increased debt does not necessarily represent a problem if managed efficiently. Debt over 60 per cent of gross domestic product (GDP) is categorized as an amber alert; the European Commission Stability and Growth Pact requires public debt must not exceed 60 per cent of GDP. Debt over 90 per cent of GDP is categorized as a red alert. Debt-to-GDP ratios above 90 per cent are associated with one per cent lower growth rates than otherwise.²²⁹ In addition, low-income countries (LICs), which received an overall risk of debt distress rank of "High" or "In distress" in the latest International Monetary Fund (IMF) Debt Sustainability Analysis, were rated as "High stress",

regardless of their level of debt-to-GDP. This indicator remains subjective and should be taken as a stress measure instead of a crisis and should always be analysed together with other macroeconomic components.

- **Energy.** This indicator ranks countries' ability to provide universal access to affordable and sufficient energy for domestic and commercial use. It is part of the World Energy Trilemma Index, which includes an Equitable Energy Ranking that sorts countries from 1 (best) to 112 (worst). Positions above 66 are considered to be amber alert and positions above 81 to be red alert.

Political and crisis indicators. Monitoring changes in violent conflict and political unrest in the Arab region remains key to ensuring food security. Three key indicators have been selected to present different aspects of political crises: social unrest, violent conflict and the number of refugees and internally displaced persons (IDPs).

- **Protests.** A high number of protest events in the 2020–2022 period can be considered a useful indicator of increased social unrest. Over 1,000 protest events are considered to be an amber alert and over 4,000 a red alert. The number of protests, however, should be analysed carefully. A very low number is not necessarily desirable as it could be an indication of a lack of rights to assembly and peaceful protest.
- **Violent events.** There were a number of violent events during 2020–2022, including riots, battles, explosions/remote violence and violence against civilians. Over 1,000 events are considered to be an amber alert and over 10,000 to be a red alert.
- **Refugees and IDPs.** In some countries, there was an increase in the number of refugees and IDPs from 2019 to 2022. Large movements of people can be an indicator of crisis in the country or neighbouring countries during the period and can also generate its own challenges in the short term. Over 100,000 additional refugees and IDPs is considered to be an amber alert and over 500,000 a red alert.

Environmental indicators. Many countries in the region are experiencing food insecurity and displacement as a result of extreme weather events. Poorer populations are more vulnerable to extreme weather events and suffer disproportionately when they happen, leading to greater inequalities in the absence of a prompt and coordinated response. Three indicators are considered based on available satellite geolocated data – extreme

temperatures, extreme precipitation and consecutive dry days – and one indicator based on the number of people estimated to have been affected by these events.

- **Extreme heat.** This indicator relates to the number of days in the 2020–2022 period that exceeded the 95th percentile threshold of daily maximum average temperature in the 1981–2010 period. The number of extreme heat days is calculated at the pixel level (10 km x 10 km) and averaged across the country. Thresholds for alert have been set at over 25 per cent of days for amber and over 30 per cent for red.

Extreme precipitation levels. This indicator records the change in the number of very heavy precipitation days (over 20 mm) in the 2020–2022 period compared to a 30-year historical average (1981–2010). The number of precipitation days is calculated at the pixel level (10 km x 10 km) and averaged across the country. Thresholds for alert have been set at an over five per cent increase from the historical average for amber and an over 15 per cent increase for red.

- **Dry days.** This indicator shows the change in consecutive dry days (CDD) in the 2020–2022 period compared to a 30-year historical average (1981–2010). The number of CDD is calculated at the pixel level (10 km x 10 km) and averaged across the country. The combination of increased CDD with extreme precipitation levels leads to an increased flooding probability. Thresholds for alert have been set at an over five per cent increase from the historical average for amber and an over 15 per cent increase for red.
- **People affected by natural disasters.** This indicator is the number of people reported to have been impacted by natural disasters (including floods, earthquakes, droughts, extreme temperatures, storms and wildfires). It comprises the number of people requiring immediate assistance, those injured and those left homeless. This indicator only includes natural disasters that fulfil one or more of the following criteria: (a) 10 or more deaths reported; (b) 100 or more affected people reported; and (c) declaration by the country of a state of emergency and/or an appeal for international assistance. Over 100,000 people affected constitutes an amber alert and over a million people affected constitutes a red alert.

Finally, other critical crises that are not captured by the indicators presented, such as the port explosion in Lebanon or the locust crises in Somalia and Yemen, are discussed in chapter 3.

Indicator description

	Indicator	Description	Time period	Data availability	Source
Economic	Inflation	Inflation based on Consumer Price Index	October 2019 to October 2022	15/22	https://data.unescwa.org/portal/CPI
	Foreign currency reserves	Total reserves in months of imports	2021	14/22	World Bank and Climate Extremes Index data
	Debt	External debt as percentage of GDP	2022	19/22	IMF World Economic Outlook Database, October 2022
	Energy	Energy security ranking	2021	14/22	https://trilemma.worldenergy.org/
Political	Protests	Number of protests	2020–2022	22/22	https://acleddata.com/about-acledd/
	Violence	Number of violent events (riots, battles, explosions/ remote violence, violence against civilians)	2020–2022	22/22	https://acleddata.com/about-acledd/
	Refugees and IDPs	Increase in the number of refugees and IDPs from 2019 to 2022	2022	22/22	https://www.unhcr.org/refugee-statistics/
Environmental	Extreme heat	Percentage of days in which temperatures exceed the 95th percentile threshold of daily maximum temperature averaged over the historical period 1981–2010	2020–2022	21/22	ESCWA calculations based on ERA5 dataset
	Extreme precipitation levels	Change in the number of very heavy precipitation days (>20 mm) in the last 3 years (2020–2022) compared to the 30-year average (1981–2010)	2020–2022	21/22	ESCWA calculations based on ERA5 dataset
	Consecutive dry days	Change in CDD in 2020–2022 compared to the 30-year average (1981–2010)	2020–2022	21/22	ESCWA calculations based on ERA5 dataset
	People affected by natural disasters	Number of people affected by natural disasters (floods, earthquakes, drought, extreme temperature, storm, wildfire)	2020–2022	22/22	https://www.emdat.be/

Threshold for amber and red alerts

	Indicator	Threshold for amber alert	Threshold for red alert
Economic	Inflation	Between 33 and 50 per cent	Above 50 per cent
	Foreign currency reserves	Between 3 and 6 months	Lower than 3 months
	Debt	Between 60 and 90 per cent	Higher than 90 per cent or receiving an overall risk of debt distress rank of “High” or “In distress” in the latest IMF Debt Sustainability Analysis
	Energy	Ranking between 66 and 81	Ranking above 81
Political	Protests	Between 1,000 and 4,000 protest events	More than 4,000 protest events
	Violence	Between 1,000 and 10,000 violent events	More than 10,000 violent events
	Refugees and IDPs	Between 100,000 and 500,000 additional refugees and IDPs	More than 500,000 additional refugees and IDPs
Environmental	Extreme heat	Over 25 per cent of days in the year	Over 30 per cent of days in the year
	Extreme precipitation levels	Over 5 per cent increase from the historical average	Over 15 per cent increase from the historical average
	Consecutive dry days	Over 5 per cent increase from the historical average	Over 15 per cent increase from the historical average
	People affected by natural disasters	More than 100,000 people affected	More than 1 million people affected

Number of countries in crisis per indicator

	Indicator	Data availability	Countries in amber alert	Countries in red alert
Economic	Inflation	15/22	0	3
	Foreign currency reserves	14/22	4	2
	Debt	16/22	5	7
	Energy	14/22	3	3
Political	Protests	22/22	6	4
	Violence	22/22	4	4
	Refugees and IDPs	22/22	3	2
Environmental	Extreme heat	21/22	2	1
	Extreme precipitation levels	21/22	1	3
	Consecutive dry days	21/22	7	1
	People affected by natural disasters	14/22	2	5



Summary of crises per country

Country	ESCWA classification	Economic shocks	Political shocks and conflict	Environmental shocks
Algeria	Middle-income country	Yellow	Red	Red
Bahrain	Gulf Cooperation Council country	Red	Yellow	White
Comoros	Least developed country	Red	White	White
Djibouti	Least developed country	Red	White	Red
Egypt	Middle-income country	Yellow	White	Red
Iraq	Country in conflict	Red	Red	Red
Jordan	Middle-income country	Red	White	White
Kuwait	Gulf Cooperation Council country	White	White	White
Lebanon	Middle-income country	Red	Red	White
Libya	Country in conflict	White	Yellow	White
Mauritania	Least developed country	Yellow	Red	White
Morocco	Middle-income country	Yellow	White	Red
Oman	Gulf Cooperation Council country	Yellow	White	White
State of Palestine	Country in conflict	White	Red	White
Qatar	Gulf Cooperation Council country	White	White	White
Saudi Arabia	Gulf Cooperation Council country	White	White	White
Somalia	Least developed country	Red	Yellow	Red
Sudan	Least developed country	Red	Red	Red
Syrian Arab Republic	Country in conflict	Red	Red	Red
Tunisia	Middle-income country	Yellow	Yellow	White
United Arab Emirates	Gulf Cooperation Council country	Yellow	White	White
Yemen	Country in conflict	Red	Red	Yellow

Annex 2.

Food security indicators and trends

Dimension	Indicator	SDG	Year	World	Arab	Gulf Cooperation Council countries	Least developed countries	Middle-income countries	Countries in conflict
Availability	Primary wheat yield as a percentage of potential achievable yield (%)	2.3.1	2016	n.a.	81.2	124.0	n.a.	94.2	56.0
	Agriculture orientation index for government expenditure	2.a.1		n.a.	4.0	0.3	0.1	0.2	n.a.
	Food loss (% of total food available)			n.a.	6.3	2.1	9.9	7.6	4.7
	Average dietary energy supply adequacy (%)			n.a.	129.2	130.8	107.4	142.8	n.a.
	Cereal import dependency ratio (%)			n.a.	61.4	94.3	n.a.	57.2	67.8
	Share of water resources used in agriculture, out of total renewable water resources (%)	6.4.2			n.a.	80.7	71.4	94.7	75.0
Accessibility	Poverty headcount ratio (% of population)	1.1.1/1.2.1/1.2.2		26.2	33.9	9.8	40.7	17.7	36.5
	Share of food consumption expenditure in total household consumption expenditure (%)		2021	n.a.	31.3	19.0	n.a.	33.1	36.2
	Unemployment rate (%)	8.5.2		6.2	10.7	4.3	18.5	9.7	14.0
	Logistics performance index		2020	2.9	2.6	3.2	2.4	2.7	2.2
	Inflation (%)		2018	1.9	17.3	2.0	275.9	14.2	n.a.

Utilization	Percentage of population using at least basic drinking water services (%)	1.4.1/6.1.1	2020	90.0	88.8	98.5	60.7	96.4	86.0
	Percentage of population using at least basic sanitation services (%)	1.4.1/6.2.1	2020	78.0	83.4	99.0	38.8	93.4	82.9
	Percentage of children under 5 years of age who are stunted (%)	2.2.1	2020	22.2	19.4	4.9	31.4	16.3	24.9
	Percentage of children under 5 years of age affected by wasting (%)	2.2.2	2016	7.5	7.7	n.a.	15.9	6.1	8.5
	Prevalence of anaemia among women of reproductive age (15-49 years) (%)		2017	29.9	33.2	27.1	38.5	30.3	39.5
Stability	Climate change – temperature change (degree Celsius)		2019	1.7	1.9	2.0	1.5	2.1	2.0
	Food price anomalies (moderate or severe)	2.c.1	2020	n.a.	n.a.	n.a.	n.a.	n.a.	-0.1
	Political stability and absence of violence			n.a.	16.0	40.4	5.8	19.7	1.5
	Per capita food production variability (\$1,000/capita) (in constant 2004-2006 \$)			n.a.	15.2	8.0	17.4	14.7	18.9
	Per capita food supply variability (kcal/capita/day)			n.a.	31.1	32.3	20.9	28.1	43.0
Core indicators	Prevalence of undernourishment (%)	2.1.1	n.a.	9.3	11.9	4.5	22.6	5.3	n.a.
	Prevalence of moderate or severe food insecurity measured using FIES (%)	2.1.2	2020	27.6	33.3	n.a.	57.2	27.2	n.a.
	Prevalence of obesity in the adult population (18 years and older) (%)		2019	13.1	28.4	34.2	n.a.	30.0	25.8

Middle-income countries

Indicator		2010	Latest		Trend
Code	Description	Value	Value	Year	
Availability indicators					
AV1	Wheat yields - %	82.7	94.2	2020	●
AV2	Agriculture expenditure - index	0.2	0.2	2018	●
AV3	Food loss (R) - %	6.7	7.6	2020	●
AV4	Dietary energy supply - %	141.2	142.8	2020	●
AV5	Wheat import dependency (R) - %	51.2	57.2	2018	●
AV6	Agriculture water (R) - %	77.7	75.0	2020	●
Access indicators					
AC1	Poverty (R) - %	30.6	17.7	2022	●
AC2	Food consumption (R) - %	42.1	33.1	2018	●
AC3	Unemployment (R) - %	9.4	9.7	2023	●
AC4	Logistics - index	2.6	2.7	2018	●
AC5	Inflation (R) - %	7.0	14.2	2022	●
Utilization indicators					
UT1	Drinking water access - %	92.8	96.4	2020	●
UT2	Sanitation access - %	89.3	93.4	2020	●
UT3	Child stunting (R) - %	18.9	16.3	2020	●
UT4	Child wasting (R) - %	n.a.	6.1	2016	
UT5	Women's anaemia (R) - %	31.5	30.3	2019	●
Stability indicators					
ST1	Climate change (R) - OC	2.2	2.1	2021	●
ST2	Price anomalies (R) - index	n.a.	n.a.		
ST3	Political stability - ranking	22.0	19.7	2021	●
ST4	Production variability (R) - 1,000\$/capita	16.3	14.7	2019	●
ST5	Supply variability (R) - kcal/capita/day	28.6	28.1	2020	●
Core indicators					
C01	Undernourishment (R) - %	4.6	5.3	2020	●
C02	Food insecurity (R) - %	26.1	27.2	2020	●
C03	Obesity (R) - %	25.9	30.0	2016	●

R = Reversed

n.a. = Not available

- Red: negative trend
- Yellow: neutral trend
- Green: positive trend

Gulf Cooperation Council countries

Indicator		2010	Latest		Trend
Code	Description	Value	Value	Year	
Availability indicators					
AV1	Wheat yields - %	117.9	124.0	2020	●
AV2	Agriculture expenditure - index	0.4	0.3	2019	●
AV3	Food loss (R) - %	2.5	2.1	2020	●
AV4	Dietary energy supply - %	125.7	130.8	2020	●
AV5	Wheat import dependency (R) - %	88.2	94.3	2018	●
AV6	Agriculture water (R) - %	76.6	71.4	2020	●
Access indicators					
AC1	Poverty (R) - %	13.6	9.8	2022	●
AC2	Food consumption (R) - %	22.6	19.0	2018	●
AC3	Unemployment (R) - %	4.4	4.3	2023	●
AC4	Logistics - index	3.3	3.2	2018	●
AC5	Inflation (R) - %	4.0	2.0	2021	●
Utilization indicators					
UT1	Drinking water access - %	98.1	98.5	2020	●
UT2	Sanitation access - %	98.6	99.0	2020	●
UT3	Child stunting (R) - %	6.5	4.9	2020	●
UT4	Child wasting (R) - %	n.a.	n.a.		
UT5	Women's anaemia (R) - %	26.1	27.1	2019	●
Stability indicators					
ST1	Climate change (R) - OC	2.0	2.2	2021	●
ST2	Price anomalies (R) - index	n.a.	n.a.		
ST3	Political stability - ranking	49.0	40.4	2021	●
ST4	Production variability (R) - 1,000\$/capita	5.4	8.0	2019	●
ST5	Supply variability (R) - kcal/capita/day	69.3	32.3	2020	●
Core indicators					
C01	Undernourishment (R) - %	6.3	4.5	2020	●
C02	Food insecurity (R) - %	n.a.	n.a.		
C03	Obesity (R) - %	30.3	34.2	2016	●

R = Reversed

n.a. = Not available

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● Yellow: neutral trend

● Green: positive trend

Countries in conflict

Indicator		2010	Latest		Trend
Code	Description	Value	Value	Year	
Availability indicators					
AV1	Wheat yields - %	46.6	56.0	2020	●
AV2	Agriculture expenditure - index	n.a.	n.a.		
AV3	Food loss (R) - %	4.7	4.7	2020	●
AV4	Dietary energy supply - %	n.a.	n.a.		
AV5	Wheat import dependency (R) - %	n.a.	67.8	2018	
AV6	Agriculture water (R) - %	86.6	88.7	2020	●
Access indicators					
AC1	Poverty (R) - %	23.3	36.5	2022	●
AC2	Food consumption (R) - %	n.a.	36.2	2017	
AC3	Unemployment (R) - %	11.0	14.0	2023	●
AC4	Logistics - index	2.4	2.2	2018	●
AC5	Inflation (R) - %	5.6	n.a.		
Utilization indicators					
UT1	Drinking water access - %	80.1	86.0	2020	●
UT2	Sanitation access - %	77.0	82.9	2020	●
UT3	Child stunting (R) - %	30.8	24.9	2020	●
UT4	Child wasting (R) - %	n.a.	8.5	2016	
UT5	Women's anaemia (R) - %	39.9	39.5	2019	●
Stability indicators					
ST1	Climate change (R) - OC	2.1	2.0	2021	●
ST2	Price anomalies (R) - index	n.a.	-0.1	2020	
ST3	Political stability - ranking	10.6	1.5	2021	●
ST4	Production variability (R) - 1,000\$/capita	14.3	18.9	2019	●
ST5	Supply variability (R) - kcal/capita/day	33.8	43.0	2020	●
Core indicators					
CO1	Undernourishment (R) - %	n.a.	n.a.		
CO2	Food insecurity (R) - %	n.a.	n.a.		
CO3	Obesity (R) - %	22.3	25.8	2016	●

R = Reversed

n.a. = Not available

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● Yellow: neutral trend

● Green: positive trend

Least developed countries

Indicator		2010	Latest		Trend
Code	Description	Value	Value	Year	
Availability indicators					
AV1	Wheat yields - %	n.a.	n.a.		
AV2	Agriculture expenditure - index	n.a.	0.1	2019	
AV3	Food loss (R) - %	2.7	9.9	2020	●
AV4	Dietary energy supply - %	112.1	107.4	2020	●
AV5	Wheat import dependency (R) - %	n.a.	n.a.		
AV6	Agriculture water (R) - %	94.5	94.7	2020	●
Access indicators					
AC1	Poverty (R) - %	n.a.	40.7	2022	
AC2	Food consumption (R) - %	n.a.	n.a.		
AC3	Unemployment (R) - %	15.8	18.5	2023	●
AC4	Logistics - index	2.0	2.4	2018	●
AC5	Inflation (R) - %	12.2	275.9	2021	●
Utilization indicators					
UT1	Drinking water access - %	50.4	60.7	2020	●
UT2	Sanitation access - %	29.1	38.8	2020	●
UT3	Child stunting (R) - %	34.8	31.4	2020	●
UT4	Child wasting (R) - %	n.a.	15.9	2014	
UT5	Women's anaemia (R) - %	39.5	38.5	2019	●
Stability indicators					
ST1	Climate change (R) - OC	1.5	1.5	2021	●
ST2	Price anomalies (R) - index	n.a.	n.a.		
ST3	Political stability - ranking	2.9	5.8	2021	●
ST4	Production variability (R) - 1,000\$/capita	n.a.	17.4	2019	
ST5	Supply variability (R) - kcal/capita/day	18.2	20.9	2020	●
Core indicators					
CO1	Undernourishment (R) - %	28.9	22.6	2020	●
CO2	Food insecurity (R) - %	n.a.	57.2	2020	
CO3	Obesity (R) - %	n.a.	n.a.		

R = Reversed

n.a. = Not available

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● Green: positive trend

Endnotes



1. This report covers 22 Arab countries: Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, the State of Palestine, Qatar, Saudi Arabia, Somalia, Sudan, the Syrian Arab Republic, Tunisia, the United Arab Emirates, and Yemen.
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The Arab region is the most unequal in the world, and inequality is increasing. The impacts of the COVID-19 pandemic, high interest rates, growing debt burdens, the cost-of-living crisis and the repercussions of the war in Ukraine – which has disproportionately affected food and energy prices – are all contributing to widening inequality, both between and within countries. Inequalities in income and wealth are mirrored by inequalities in access to food. Around 181 million people across the region, close to 35 per cent of the Arab population, are food insecure; 12 million more than just one year ago. The majority of food insecure people also live in poverty.

This report analyses the four pillars of food security: availability, access, utilization and stability, from an inequality lens. It provides policy recommendations for addressing inequality in food security through strengthening agricultural systems, production and trade, and also for mitigating climate change while adapting to its growing effects and improving disaster risk management. The report calls for immediate humanitarian assistance when shocks do occur, without political implications. Regional solidarity is called for in redistributing resources from those that have plenty to those that do not, coupled with increased investments in health, education and social protection.

