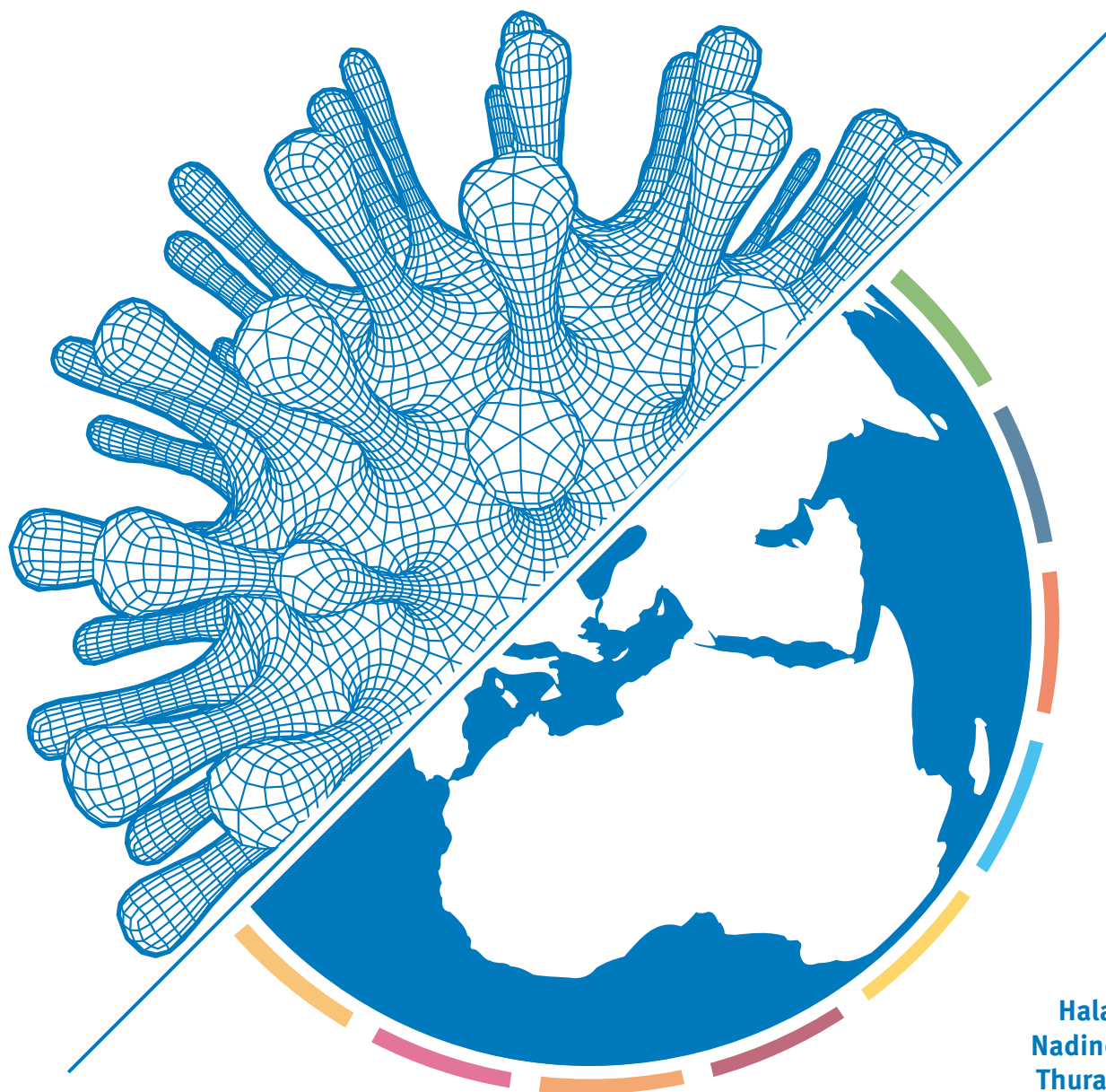# Regional Bureau for Arab States

RESEARCH PAPER

UNDP

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The Impact of COVID-19 on Progress Towards Achieving the SDGs

Using a human development lens to analyse the case of the Arab region

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List of abbreviations

ASDR	Arab Sustainable Development Report
CNT	National Confederation of Tourism
COVID-19	Coronavirus disease 2019
EGP	Egyptian pounds
EMR	Eastern Mediterranean Region
ESCWA	United Nations Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organization
FIES	Food Insecurity Experience Scale
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GNI	Gross national income
HDI	Human Development Index
IDP	Internally displaced person
ILO	International Labour Organization
IMF	International Monetary Fund
LDC	Least developed countries
LIFDC	Low-income food-deficit countries
LiST	Lives Saved Tool
LMIC	Low- and middle-income countries
MCD	Middle East and Central Asia Department
MPI	Multidimensional Poverty Index
MENA	Middle East and North Africa
MIC	Middle-income country
MMR	Maternal mortality ratio
NCD	Non-communicable disease
NEET	Not in employment, education or training
NENA	Near East and North Africa
PCBS	Palestinian Central Bureau of Statistics
OPHI	Oxford Poverty & Human Development Initiative
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PoU	Prevalence of undernourishment
RAMED	Régime d'Assistance Médicale aux Economiquement Démunis [Regime for Medical Assistance to the Most Deprived]
SDG	Sustainable Development Goal
STEM	Science, technology, engineering, and mathematics
WASH	Water, sanitation and hygiene
WFP	World Food Programme
WHO	World Health Organization
WHO EMRO	World Health Organization Regional Office for the Eastern Mediterranean
UAE	United Arab Emirates
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency
WTO	World Tourism Organization

Executive Summary

The impacts of the COVID-19 pandemic are twofold: the consequences of the virus itself and those of the measures that were set up to control and mitigate its spread. The morbidity and mortality resulting from the disease directly affect humans' capabilities and development, while measures put in place to control and mitigate the disease hinder both economic productivity and education and increase vulnerabilities. Together, these impacts have reversed progress towards attaining the SDGs in the Arab region, including further exacerbating inequalities in the region. This assessment has focused on SDG 1 ("No poverty"), SDG 2 ("Zero hunger"), SDG 3 ("Good health and well-being"), SDG 4 ("Quality education"), and SDG 8 ("Decent work and economic growth"). SDG 10 ("Reduced inequality") is highlighted within the other sections as a crosscutting goal.

Emerging findings from preliminary data indicate that the COVID-19 pandemic has had a significant effect on progress towards achieving SDG targets in the Arab region. Initial reports on SDG 1 predict that between 8.3 and 12.3 million people will have fallen into extreme poverty by 2021. It is estimated that approximately 30 million people were living on less than US$1.90 per day in 2018, which increased to 36 million during 2020.

An additional 4 million people across the region became undernourished during 2020, compared with a baseline of 48 million prior to the pandemic, impeding progress on achieving SDG 2 targets. Progress on SDG 2 will be further affected by increased food shortages, undermining the food security in a region in which 50 million people were already food-insecure prior to the pandemic.

Disruptions to health care services, fear of infection and lockdown-related measures have been projected to have a severe impact on SDG 3 targets. Preliminary models estimate that between 11,000 and 51,000 additional under-five deaths will occur in the region. The maternal mortality ratio (MMR) increased by 16 deaths per 100,000 live births during 2020. The increase in the MMR was higher in Mashreq and Maghreb countries, while smaller increases occurred in Gulf Cooperation Council (GCC) countries and Arab least developed countries (LDCs).

Progress towards SDG 4 targets has also been severely impacted by school closures resulting from pandemic containment measures. Differential access to the Internet will contribute to further exclusion and inequalities as learning and education have moved online. Due to the above factors, it is estimated that many students will be pushed into learning poverty in the Arab region. A World Bank simulation showed that even in the most optimistic scenario, the Learning-Adjusted Years of Schooling will drop in the Arab region and the number of students who are below the Programme for International Student Assessment (PISA) minimum proficiency level will increase. Other estimations by the United Nations Development Programme (UNDP) indicate that gross primary and secondary completion rates will be negatively affected.

The multiple effects of the COVID-19 pandemic, including an oil shock and economic and trade disruptions, have negatively affected the economies of the Arab region. Tangible impacts on SDG 8 will include lower oil prices, a reduction in received remittances and tourist arrivals, and a substantial increase in unemployment across different sectors. The situation of migrant workers and individuals who are employed in the informal sector is particularly precarious and alarming. The International Monetary Fund (IMF)'s Regional Economic Outlook published in April 2021 pointed to an economic contraction of -4.2 percent in 2020 across the Arab region. [1] However, there are important disparities in the outlook for subregions, which are characterized by different economic structures and dynamics. Economic recovery also remains uncertain but would be negatively affected by the slow roll-out of the vaccines, particularly in low-income countries, as well as by new restrictions to contain new waves of infection.

These negative implications compound existing vulnerabilities and since there are currently no shock-absorbing or recovery systems in place in the region, the effects of these implications will remain in the medium and long term. Social protection has not adequately protected those in most need, for example, in several countries, cash assistance afforded to the informal sector has been lower than the minimum wage. Consequently, the social protection schemes implemented in response to the pandemic in the Arab region have been insufficient and have often not sufficiently reached the most vulnerable populations. In summary, the COVID-19 pandemic, its multiple shocks and multidimensional effects have exacerbated existing inequalities, inhibited human capabilities and development, and impeded progress towards attaining the SDGs.

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[1] The IMF's "Arab world" country grouping includes the 22 countries of the Arab League: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen

Introduction

In January 2020, the first case of COVID-19 was recorded in the region, in the United Arab Emirates (UAE; United Nations Economic and Social Commission for Western Asia [ESCWA], 2020g). By the end of December 2020, the total number of recorded cases in the Arab region had reached approximately 3.3 million cases, with over 56,000 recorded deaths (ESCWA, 2020g). These numbers are set to continue to rise.

The intensity of the pandemic varies across the different countries of the region. Each has experienced significantly different outcomes. By December 2020, Bahrain had the highest number of recorded cases at 6,500 cases per 100,000 population (ESCWA, 2020g), although it had a relatively low number of recorded deaths, with a case fatality rate of 0.37 percent (ESCWA, 2020g). In contrast, Yemen, which had the lowest recorded cases per 100,000 population at 7.3 cases per 100,000 population, had the highest case fatality rate in the region to date, at nearly 29 percent. Yemen's case fatality rate is substantially higher than Syria's, and Egypt's whose case fatality rate is approximately 6 percent (ESCWA, 2020g). Although these disparities may be explained by a lack of testing and under-reporting, they are also indicative of existing inequalities and vulnerabilities, including economic inequalities, underdeveloped health systems and conflict. These inequalities and vulnerabilities will be at the forefront of this analysis.

In response to the COVID-19 outbreak in early 2020, nations within the Arab region implemented varying public health strategies to limit the spread and prevent health systems from being overwhelmed. With the resurgence of COVID-19 in sequential waves, countrywide lockdowns and other restrictions have been implemented as rates have increased (Hale and others, 2021). The impact of multiple waves and their corresponding mitigation measures on human capabilities and development is striking.

At the end of 2020, several new COVID-19 vaccines were being developed. Bahrain and the UAE were the first two Arab States to approve the Chinese Sinopharm vaccine, with both countries rolling it out in December 2020 (Cyranoski, 2020). Although the impacts of the COVID-19 vaccine on development are beyond the scope of this paper, the effects of the pandemic in the Arab region that are discussed in this analysis may provide future insight into the vaccine roll-out. In particular, variability in vaccine coverage will exacerbate existing inequalities, vulnerabilities and exclusions across the region.

This paper analyses the impact of the COVID-19 pandemic, the public health measures put in place to contain its spread and national-level responses for economic and social recovery on progress towards achieving the SDGs in the Arab region. It focuses on SDGs that are directly reflective of human capabilities (poverty, health, education, food insecurity, decent work and inequalities), and uses case studies to illustrate documented or theoretical impacts depending on data availability. It builds on available global and regional evidence on policy measures to derive equity-focused policy recommendations to accelerate progress towards the SDGs post-COVID-19 in the Arab region.

Conceptual framework

Overview

A conceptual framework has been developed to guide the assessment of the impact of COVID-19 on SDG progress within the Arab region. It builds on multiple frameworks of relevance (Carney, 1999; United Nations Development Programme [UNDP], 2013; Abdellatif, Pagliani and Hsu, 2019; UNDP, 2020a; Oxford Poverty & Human Development Initiative [OPHI] and UNDP, 2020; Organisation for Economic Co-operation and Development [OECD], 2020; Mukherjee and Bonini, 2020) and focuses on the concepts of human capabilities and human development, vulnerability, resilience to shocks, and COVID-19 impact pathways. These were adapted and integrated into the proposed framework (**Figure 1**).

Figure 1. Conceptual framework of the impact of COVID-19 on the SDGs
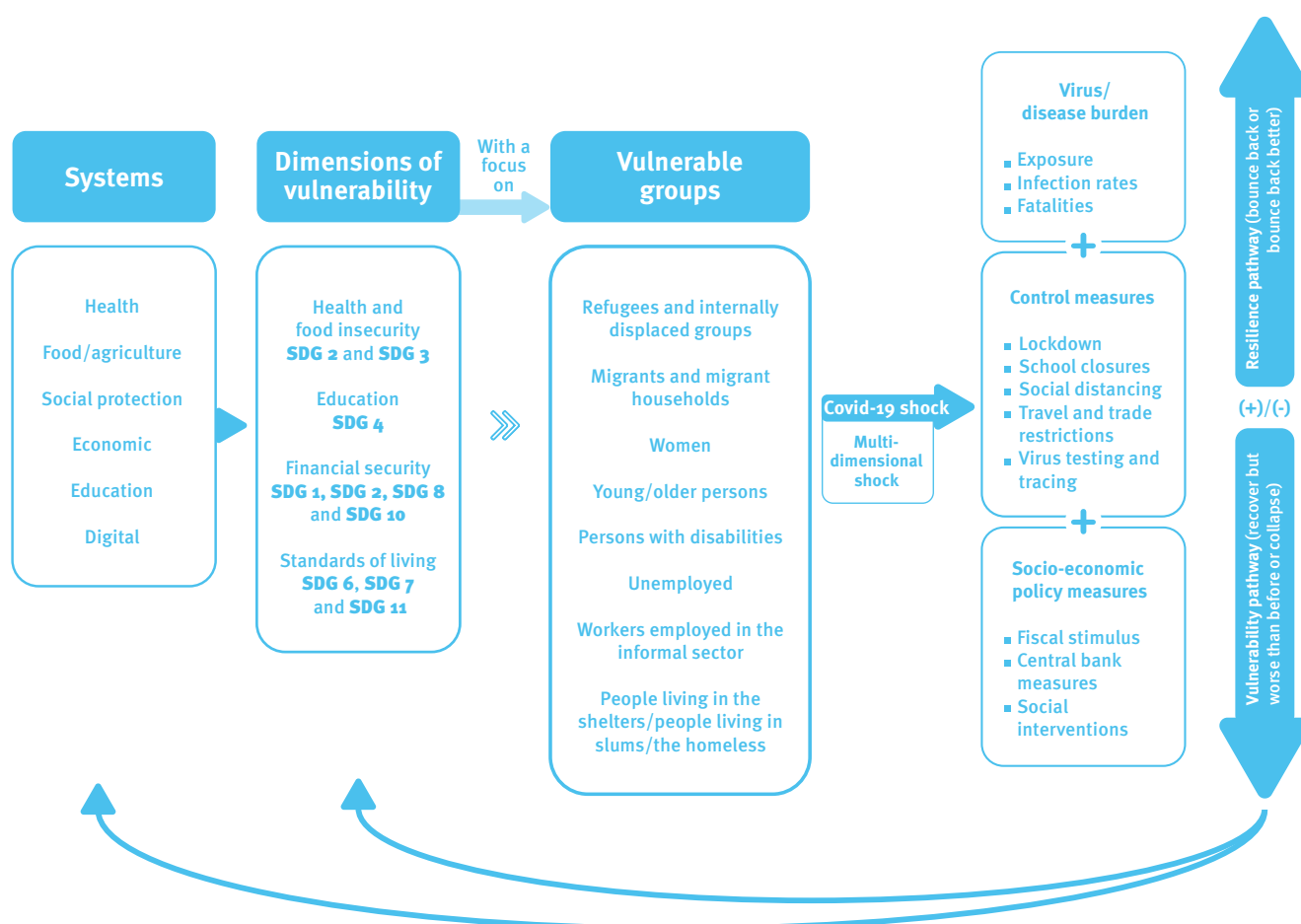
Regional coverage

The Arab region covered in the scope of this paper includes the following 20 countries, located in North Africa and Western Asia and the Horn of Africa: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, UAE and Yemen.

The following subregional groupings are also referred to in the report:

Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE.

The Mashreq subregion: Egypt, Iraq, Jordan, Lebanon, Palestine and Syria.

The Maghreb subregion: Algeria, Libya, Morocco and Tunisia;

The Arab LDCs subregion: Djibouti, Somalia, Sudan and Yemen.

Wherever the report refers to a source that used a different classification of Arab countries, this will be indicated.

Framework components

COVID-19 shock

The pandemic has evolved from a health shock to an economic and social crisis. In some Arab countries, the socio-economic shocks were felt before the health shocks due to the early lockdowns and restrictions put in place to contain the spread of the virus. These socio-economic shocks were more acutely experienced in countries that had low readiness and capacity to respond to the outbreak and to withstand a dual health and economic crisis (UNDP, 2020a).

The influence of the COVID-19 pandemic on human capabilities has been attributed to the virus itself, the control measures that were implemented to contain its spread and the socio-economic measures implemented to alleviate the economic costs and losses. The disease can affect human capabilities and development through the resulting morbidity and mortality. Control measures such as lockdowns, closures, mobility restrictions and changes to the mobilization of resources also have an impact, with policy measures and national responses implemented to reduce the resulting socio-economic losses. On the level of containment measures, the national policies put in place to contain the pandemic have had a substantial effect on individual autonomy, limiting "functionings" such as education, mobility, and health care. In addition, the economic downturn of the COVID-19 shock also limits resource availability. The decreased access to resources, in turn, further limits the ability and freedom to make choices, and thus undermines individual capabilities and human development (Stewart, 2013).

Systems

The term "systems" is used to describe systems, infrastructure and policies in place in the region pre-pandemic that largely determine a country or region's level of human development. In this framework, we examine health, food and agriculture, social protection, economic structure, education and digital connectivity, among other dimensions included in **Figure 1**. These not only influence human capabilities across the dimensions of vulnerability (pre- and during the pandemic), but also play a role in mitigating the impact of COVID-19. These systems reflect the country/regional preparedness and capacity to withstand the COVID-19 shock.

Dimensions of vulnerability and exclusion

This paper aims to examine the SDG indicators reflective of human capabilities (including SDG 1: poverty; SDG 2: food insecurity; SDG 3: health; SDG 4: education; SDG 8: economic growth and employment and SDG 10: inequalities) in both the pre- and peri-COVID contexts. No up-to-date indicators were available for SDG 10 in the peri-COVID context; inequalities were crosscutting and integrated into each SDG's analysis. The report relies on the Arab Sustainable Development Report (ASDR) (2020) to assess the Arab region's performance in achieving SDGs before the pandemic (ESCWA, 2020b). Using this report to determine the prior state of human development indicators can help us ascertain the extent of the impact of COVID-19 on SDG progress. The SDG indicators of interest in this paper are framed within the four main dimensions of vulnerability to shocks, as per the Multidimensional Poverty Index (MPI): health and food insecurity, education, financial security and standards of living[2].

Vulnerable groups and forces of exclusion

In a region where "vulnerable humans reside in vulnerable states", existing inequalities are amplified by the COVID-19 pandemic (United Nations Sustainable Development Group [UNSDG], 2020). Informed by the classification of UNDP's general assessment of the implications of COVID-19 on human development, we consider the following to be vulnerable groups:[3] refugees and internally displaced groups, migrants (and migrants' households), women, young people and older persons, persons with disabilities, the unemployed, workers employed in the informal sector and people living in precarious housing (OECD, 2020; UNSDG, 2020).

Control measures to contain the spread of the virus

There are two main categories of national response. The first is those implemented to prevent the spread of COVID-19. These include curfews, airport closures, enforced lockdowns, and banning or limiting social gatherings. The second includes national measures implemented to mitigate the economic and social impact of the national or international public health measures. These include fiscal and social protection measures. Both the public health measures and the socio-economic mitigation measures play an important role in mediating or enhancing the impact of COVID-19 on progress towards the SDGs and are reviewed in detail in *Assessing Multi-Sectoral Collaborations in the COVID-19 Pandemic Response in Selected Arab Countries*.

The public health response to COVID-19 has varied across the Arab region. The national response in each country in the Arab region has been tracked from the start of the pandemic by the Oxford Government Response Stringency Index (**Figures 2–4**; Angrist and others, 2020). The Oxford Government Response Stringency Index is a composite score comprised of nine indicators including school closures; workplace closures; public events cancellation; ban on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; internal movement restrictions; and international travel controls. Interestingly, there was an early response to COVID-19 in the Maghreb countries (March 2020), a delayed response in countries in the Arab peninsula and variability in speed of responses in the Eastern Mediterranean. COVID-19 response measures were generally strict from February to July 2020, decreased in strictness over the summer period and then became stricter during autumn 2020.

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[2] The Multidimensional Poverty Index provided the framework and justification for the chosen SDGs within this report. Although standards of living also include indicators from SDG 6: clean water and sanitation; SDG 7: affordable and clean energy and SDG 11: sustainable cities and communities, these are outside of the scope of this paper.

[3] The gendered implications of the pandemic and its impact on refugees and internally displaced groups are examined in depth in *COVID-19 and Gender in the Arab States: Using a human development lens to explore the gendered risks, outcomes and impact of the pandemic on women's health*, and *Overlapping Fragilities: the Impact of COVID-19 on Refugees and IDPs in Conflict-Affected Countries in the Arab Region.*

Figure 2. The strictness of the lockdown for Maghreb countries plus LDCs (measured by the Oxford Stringency Index)

MOROCCO ALGERIA SUDAN SOMALIA LIBYA TUNISIA YEMEN DJIBOUTI
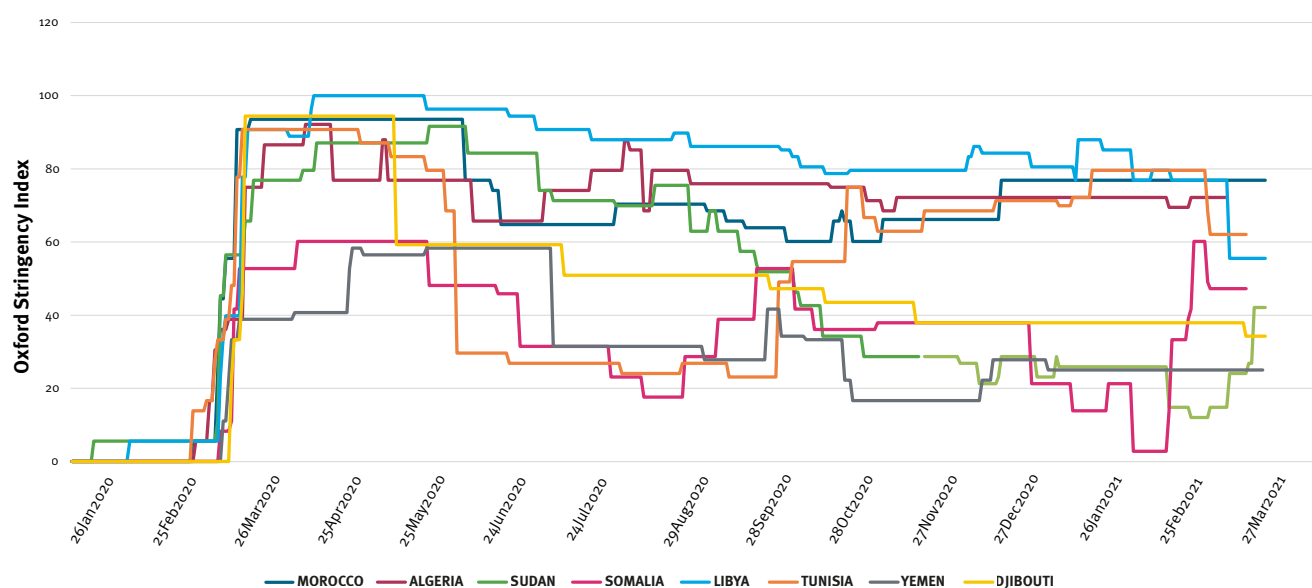
Figure 3. The strictness of the lockdown for GCC countries (measured by the Oxford Stringency Index)

UNITED ARAB EMIRATES BAHRAIN KUWAIT QATAR SAUDI ARABIA OMAN
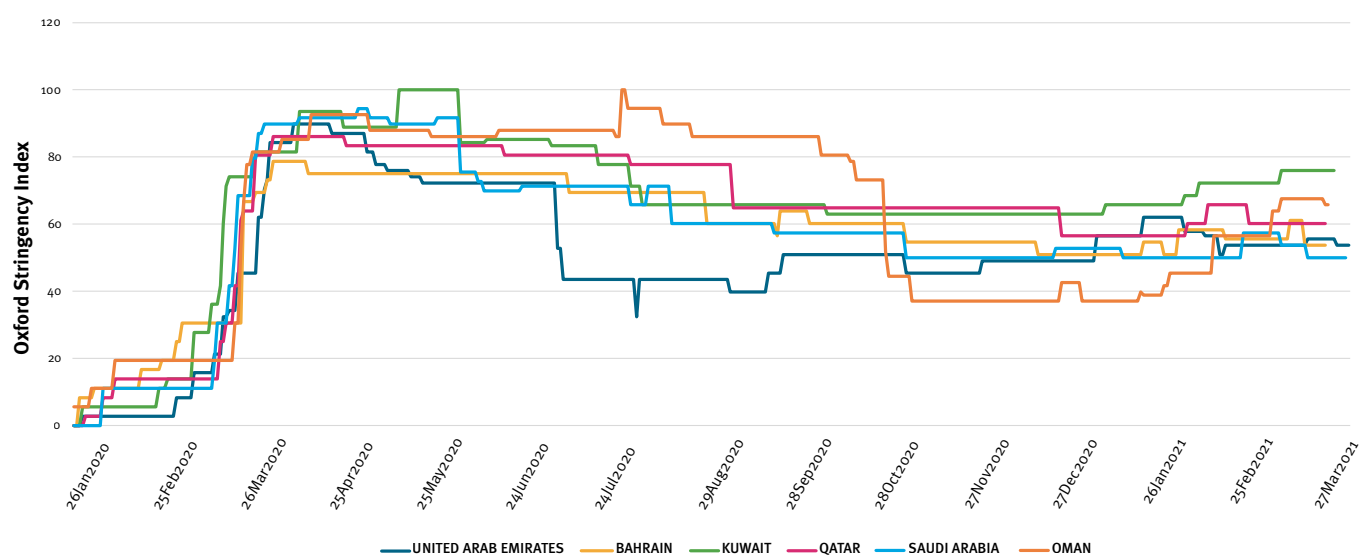
Figure 4. The strictness of the lockdown for the Mashreq (measured by the Oxford Stringency Index)

Legend: SYRIA — EGYPT — IRAQ — JORDAN — LEBANON — PALESTINE
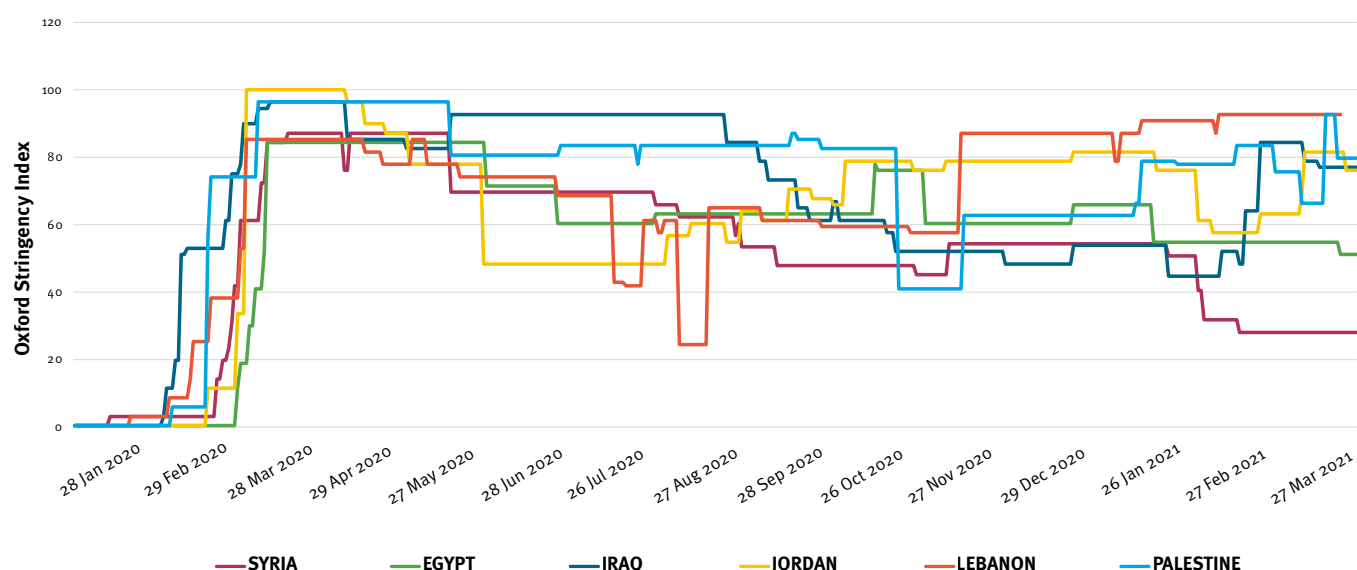
Socio-economic measures to mitigate losses[4]

Similarly, the national response to minimize the socio-economic impact of COVID-19 varied across the Arab region. Most countries in the region implemented an array of health, fiscal and monetary measures to help citizens and businesses cope with losses resulting from the pandemic. The national responses consisted of higher spending on health and social transfers in oil-importing countries while most oil-exporting countries focused on temporary tax reductions, extension of tax payment deadlines, increasing spending in specific areas (financing partial payment of salaries) and other loan provisions (International Monetary Fund [IMF], 2020b).

Social protection policy interventions in the Arab region consisted mainly of cash transfers and income support measures (**Table 1**; World Bank and IMF, 2020). However, the social protection schemes put in place in response to the pandemic in the region have been insufficient (Abdo and Almasri, 2020). Despite half the countries in the region announcing plans to target the most vulnerable, social protection has not adequately protected those most in need and it is not clear to what extent various segments of society have access to these measures. Findings of rapid assessments and household surveys highlight that vulnerable households had very limited access to support to cope with substantial income and job losses.[5]

There was also evidence of substantial inequalities in the distribution of COVID-19-related social protection in MENA with only 25 percent of people in the lowest income quintile receiving social assistance compared with a global average of 30 percent, according to Oxfam (Abdo and Almasri, 2020; Mathai and others, 2020). The inequitable distribution of social support is particularly problematic, as COVID-19 will push more people further into poverty due to unemployment and wage cuts. Social protection is biased towards those who work in formal employment within the private sector, which is estimated to account for fewer than 20 percent of workers in MENA (Abdo and Almasri, 2020). Consequently, those who work in the informal sector, of whom 85 percent are youths (15–29 years old), are likely to be impacted the most by poor coverage by social protection schemes (ESCWA, 2020e).

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[4] An evaluation of the economic measures that were taken in the region was conducted in *Assessing Multisectoral Collaborations in the COVID-19 Pandemic Response in Selected Arab Countries*.
[5] See section on SDG 8, **Box 3**.

Table 1 summarizes the main social assistance, social insurance and labour market measures that were implemented in the region as of mid-September 2020.

Initiatives were also taken across the Arab region to support health and food security. Food assistance and distribution programmes targeting vulnerable families and households were implemented in several Arab States, including Algeria, Egypt, Iraq, Kuwait, Lebanon, Oman and Syria. Many of these interventions targeted vulnerable populations such as persons with disabilities and older persons. Food security interventions were often coupled with initiatives to distribute hygiene kits and supplies. The Ministry of Social Development provided hygiene kits to 18,000 families in the West Bank and Gaza, including women-headed families, persons with disabilities and older persons (UNDP, 2021). In Algeria and Egypt, food distribution programmes also distributed hygiene kits. Initiatives were also taken to support health systems during the pandemic, with governments across the Arab region reallocating funds towards strengthening health services and procuring medical supplies (UNDP, 2021).

Table 1. Social assistance, social insurance and labour market measures introduced since March 2020 in the Arab region

COUNTRIES	Social assistance				Social insurance				Labour markets			
	Cash-based transfers	Public works	In-kind	Utility and financial support	Paid leave/ unemployment	Health insurance support	Pensions and disability benefits	Social security contributions (waivers/subsidies)	Wage subsidy	Activation (training)	Labour regulation adjustment	Reduced work time subsidy
ALGERIA					■		■	■				
BAHRAIN					■				■			
DJIBOUTI												
EGYPT							■		■			
IRAQ												
JORDAN					■			■				
KUWAIT					■			■				
LEBANON					■							
LIBYA												
MOROCCO					■			■				
PALESTINE												
OMAN					■				■		■	
QATAR					■	■			■	■		
SAUDI ARABIA												
SUDAN												
SYRIA												
TUNISIA					■			■				
UAE									■	■		■

Source: Gentilini and others (2020).
Note: Mapped measures and interventions as at 18 September 2020.

SDG 1. End poverty in all its forms everywhere

The first SDG—the goal to end poverty in all its forms everywhere by 2030—is severely undermined by the COVID-19 pandemic and consequent global economic crisis. Poverty, whether in the form of income poverty or asset poverty, has consequences for the attainment of most other SDGs. In the Arab region, many impoverished people are multidimensionally poor (ESCWA, 2020b). Multidimensional poverty affects dimensions of health and nutrition (SDGs 2 and 3), education (SDG 4), as well as contributing to inequality and exclusion (SDG 10). The resulting subregional and subnational inequalities have implications on SDG 8. Human capabilities, too, are strongly impacted by poverty, as poverty contributes to the deprivation and exclusion of individuals and can affect the ability of people to interact in society (Stewart, 2013). It limits their ability to make choices, including choosing essential services such as health care and education. Understanding the impact of COVID-19 on the progress of Arab States in fulfilling SDG 1 is critical to our understanding of the impact of the pandemic on human capabilities and development.

Background: Poverty in the Arab region

Before the pandemic, Arab States were characterized by high rates of poverty, with extreme poverty prevalent in LDCs (ESCWA, 2020b). Due to protracted conflicts in the region, extreme poverty rose from 4 percent to 6.7 percent between 2013 and 2015 (ESCWA, 2020b). Poverty measures also show that poor populations, particularly in middle-income countries (MICs), are clustered close to the extreme poverty line, indicating a pre-existing high level of vulnerability to falling into extreme poverty. Arab LDCs also have the highest proportion of population living under the international poverty line of $1.90 compared with other Mashreq, Maghreb and GCC countries and a wide variation exists between non-LDC countries and regions. Barriers to attaining SDG 1 targets include huge wealth inequalities; exclusion of vulnerable groups from economic opportunities; lack of adequate economic policies focused on development rather than economic growth in general; lack of social protection and widely prevalent conflict and displacement (ESCWA, 2020b). These barriers not only undermine progress towards achieving SDG 1 targets, but are also exacerbated by poverty and exclusion. Additionally, in Arab States, the lack of financial resources and significant public debt further impede progress[6] (ESCWA, 2020b).

COVID-19 shock

The COVID-19 pandemic precipitated a worldwide economic slowdown. Estimates in the Arab region point to a 5.7 percent contraction in the region's economy, resulting in an estimated loss of income of $152 billion during 2020 (ESCWA, 2020f). A report in April 2020 predicted that in the Arab region, the economic shutdown would negatively impact jobs, income, business and the flow of remittances, with an estimated 8.3 million additional people set to fall into extreme poverty by 2021 (living on under $1.90 per day) (ESCWA, 2020f). This is especially pertinent when considering that large populations in the Arab region are clustered immediately above the poverty line, and thus are particularly vulnerable to falling into poverty (ESCWA, 2020b). If these projections hold true, an estimated 101.4 million people in the region will be classified as poor (ESCWA, 2020f).

Other reports place the estimates at even higher levels: Oxfam estimates that the pandemic and pandemic-related containment measures will lead to 12.3 million additional people in MENA living on $1.90 per day or less if there is a 20-percent contraction in income (Oxfam, 2020). These projections show that the consequences of this crisis could be particularly severe on vulnerable groups, especially women, youth, refugees and migrants, and informal workers who generally have no access to social protection and unemployment insurance. Oxfam estimates that 89 percent of 16 million informal workers in MENA have no social protection (Abdo and Almasri, 2020).

It is likely that the challenges to achieving SDG 1 are even more acute in conflict-impacted countries. By December 2020, an estimated 4.4 million people and 1.1 million refugees and internally displaced persons (IDPs) in host communities in the Kurdistan region of Iraq, Jordan and Lebanon were reported to have been pushed into poverty due to the COVID-19 pandemic (United Nations High Commissioner for Refugees [UNHCR] and World Bank, 2020).

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[6] See **Box 3**.

Scope

Several indicators were chosen that align with the conceptual framework and changes in human capabilities due to COVID-19. To allow a comparison of changes, both data and projections from the pre- and peri-COVID pandemic were presented.

Target 1.1. includes extreme poverty according to the international poverty line, and target 1.2 consists of poverty according to national definitions. Target 1.4 comprises access to basic services as well as ownership of land and other forms of property. Target 1.5 measures the resilience of poor and vulnerable populations to economic, social and environmental shocks.

Data gaps

The targets and indicators chosen for the assessment of the impact of COVID-19 on poverty in the Arab region reflect the mapping of dimensions of multidimensional vulnerability according to the MPI (UNDP and OPHI, 2020). Indicators 1.1.1, 1.2.1 and 1.5.2 reflect monetary poverty, which is considered a determinant of the magnitude of the effects of the COVID-19 shock on populations and on human capabilities in general. Target 1.4 reflects asset poverty, for which little data currently exist in the Arab region. Targets and indicators for which data gaps exist were included in this assessment to cover the multiple dimensions of vulnerability outlined in the conceptual framework.

SDG 1 target	Indicator
Target 1.1. By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	**1.1.1.** Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)
Target 1.2. By 2030, reduce at least half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	**1.2.1.** Proportion of population living below the national poverty line, by sex and age
Target 1.4. By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	**1.4.1.** Proportion of population living in households with access to basic services
	1.4.2. Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure
Target 1.5. By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks	**1.5.2.** Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)

Poverty in the Arab region is projected to increase for the first time since 1990

Target 1.1. By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day

Indicator 1.1.1. Proportion of the population living below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

Data on extreme poverty in Arab States prior to the pandemic (**Figure 5**) reveal stark discrepancies in the prevalence of extreme poverty between countries (ESCWA, 2020b), which suggests that this indicator will be impacted differently across different Arab States. These pre-COVID-19 levels of extreme poverty indicate that inequality could be further exacerbated in the context of the pandemic.

Table 2 shows the percentage of the population living on under $1.90 a day in Arab States according to three scenarios (no COVID-19 scenario, COVID-19 baseline scenario and high damage scenario) in 2018, 2020 and 2030 (UNDP, 2020b). Other than Lebanon and Somalia, poverty was projected to decrease by 2030 in most countries in the no COVID-19 scenario. However, the COVID-19 baseline scenario illustrates that the percentage of the population living on less than $1.90 a day in almost all countries for 2020 will rise, with much steeper increases in the high damage scenario. Arab LDCs are particularly vulnerable with high pre-existing levels of extreme poverty.

Table 2. Percentage of population living on under $1.90 a day in Arab States according to the three COVID-19 impact scenarios during 2018 and 2020, and projected for 2030

Percentage of population living on less than $1.90 per day		2018	2020	2030
ALGERIA	No COVID scenario	0.266	0.296	0.237
	COVID-19 baseline scenario	0.266	0.336	0.271
	High damage scenario	0.266	0.551	0.56
DJIBOUTI	No COVID scenario	21.81	28.68	17.11
	COVID-19 baseline scenario	21.81	31.48	18.58
	High damage scenario	21.81	34.22	24.18
EGYPT	No COVID scenario	1.479	1.449	1.208
	COVID-19 baseline scenario	1.479	1.472	1.388
	High damage scenario	1.479	2.1	2.183
IRAQ	No COVID scenario	1.415	1.278	0.392
	COVID-19 baseline scenario	1.415	1.97	0.443
	High damage scenario	1.415	2.804	1.725
JORDAN	No COVID scenario	0.187	0.156	0.045
	COVID-19 baseline scenario	0.187	0.217	0.053
	High damage scenario	0.187	0.396	0.133
LEBANON	No COVID scenario	8.134	12.76	16.25
	COVID-19 baseline scenario	8.134	20.21	19.32
	High damage scenario	8.134	23.24	34.66
LIBYA	No COVID scenario	2.244	1.937	0.673
	COVID-19 baseline scenario	2.244	1.844	0.02
	High damage scenario	2.244	2.576	0.028
MOROCCO	No COVID scenario	0.836	0.837	0.592
	COVID-19 baseline scenario	0.836	0.87	0.641
	High damage scenario	0.836	1.302	1.139
PALESTINE	No COVID scenario	0.856	1.217	0.913
	COVID-19 baseline scenario	0.856	1.911	0.958
	High damage scenario	0.856	2.746	1.786
SOMALIA	No COVID scenario	53.78	60.59	58.26
	COVID-19 baseline scenario	53.78	62.55	63.03
	High damage scenario	53.77	63.98	64.42
SUDAN	No COVID scenario	11.41	12.71	9.479
	COVID-19 baseline scenario	11.41	15.3	8.773
	High damage scenario	11.41	17.97	12.38

Percentage of population living on less than $1.90 per day		2018	2020	2030
SYRIA	No COVID scenario	11.18	10.71	8.086
	COVID-19 baseline scenario	11.18	10.62	7.457
	High damage scenario	11.18	12.64	10.24
TUNISIA	No COVID scenario	0.388	0.475	0.336
	COVID-19 baseline scenario	0.388	0.541	0.375
	High damage scenario	0.388	0.843	0.699
YEMEN	No COVID scenario	40.37	39.07	21.41
	COVID-19 baseline scenario	40.37	42.83	32.87
	High damage scenario	40.37	45.35	38.33

Source: UNDP (2020b).
Note: No data were available for Bahrain, Kuwait, Oman, Qatar, Saudi Arabia or the UAE. The no COVID-19 scenario shows the progress of these countries before the pandemic; the COVID-19 baseline scenario is based on known data on the impact of COVID-19 up to 2020; and the high damage scenario is a pessimistic scenario.

Initial modelling of headcount poverty and poverty gap ratios can provide insight on indicator 1.1.1. Using a poverty line of $1.90 per day, headcount ratio modelling in 14 non-GCC countries (**Figure 5**; ESCWA, 2020d) shows the number of people in extreme poverty in these countries is expected to increase by 9.1 million because of the pandemic. UNDP estimates that an extra 6 million people will be pushed into poverty, in addition to the around 30 million people already living on less than $1.90 per day in 2018 (UNDP, 2020b).

Figure 5. Number of poor (in millions) based on headcount poverty ratios using $1.90 per day poverty line (%), projected scenario
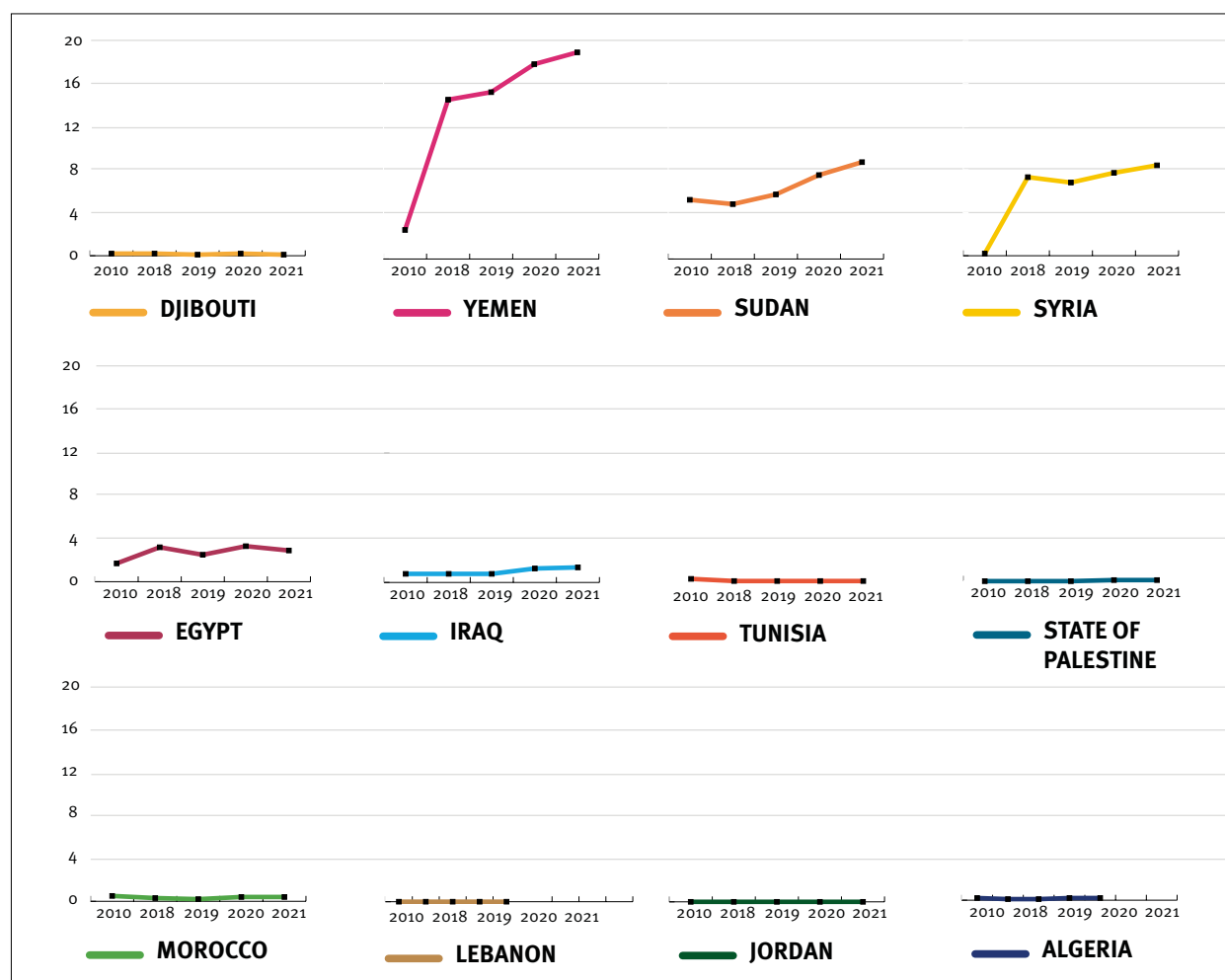
Number of poor (in millions) based on headcount poverty ratios using $1.90 per day poverty line (%), in the region
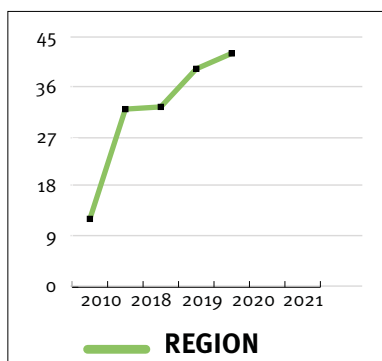
Source: Adapted from ESCWA (2020d).[7]
Note: Data was not available for Bahrain, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Somalia or the UAE.

Poverty in the MENA region to increase for the first time since the 1990s

According to estimates in Sumner, Hoy and Ortiz-Juarez (2020), a contraction in income as small as 5 percent could result in an increase in the incidence of global poverty, as well as an increase in poverty in the MENA[8] region, for the first time since 1990. **Table 3** summarizes the simulations of Sumner, Hoy and Ortiz-Juarez (2020) for the poverty rate and poverty headcount for MENA using three different poverty lines and for three scenarios of the size of reduction in income.

Table 3. Poverty headcount projection under three scenarios (5%, 10%, 20%) of per capita income contraction

Poverty rate: $1.90 (%)	Headcount: $1.90 (million)	Poverty rate: $3.20 (%)	Headcount: $3.20 (million)	Poverty rate: $5.50 (%)	Headcount: $5.50 (million)
Reference year: 2018					
7.2	27.9	19.8	76.8	44.8	173.5
Scenario 1: 5% income contraction					
8.0	31.2	21.8	84.4	47.3	183.4
Scenario 2: 10% income contraction					
8.9	34.7	24.1	93.4	50.1	194.2
Scenario 3: 20% income contraction					
11.3	43.7	29.2	113.2	55.9	216.6
Source: Sumner, Hoy and Ortiz-Juarez (2020).					

Valensisi's (2020) modelling study on global poverty predicted that the MENA region's headcount for extreme poverty would increase by more than 1.2 percentage points because of the COVID-19 pandemic. According to this model, this increase in extreme poverty indicates a reversal of the headcount ratio back to the regional levels of the mid-1980s.

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[7] The regional calculation in **Figure 5** includes Comoros and Mauritania.
[8] The data represented cover the Middle East and North Africa (MENA) region. The countries covered are not specified within this paper. We have included these data due to the close regional overlap of the MENA and Arab regions, and thus its potential to provide a general idea of regional trends

Target 1.2. *By 2030, reduce by at least half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions*

Indicator 1.2.1. Proportion of population living below the national poverty line, by sex and age

Figure 6. Proportion of the population living under the national poverty lines
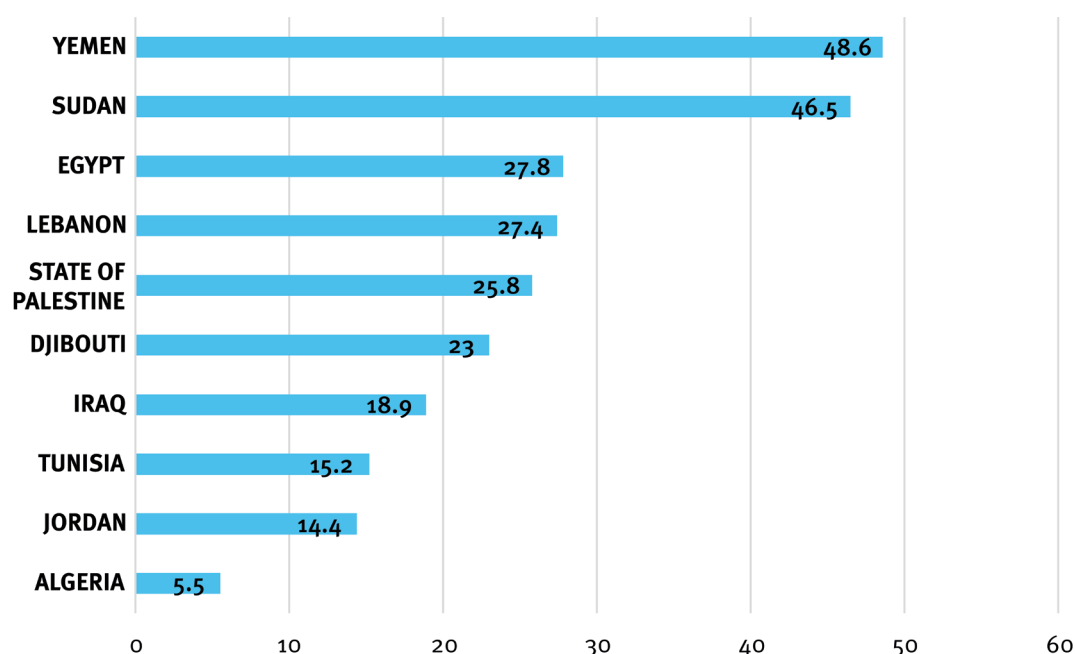
Source: ESCWA (2020b).
Note: Data are from various years as follows: Sudan (2009); Jordan (2010); Algeria and Palestine (2011); Iraq and Lebanon (2012); Djibouti (2013); Yemen (2014); Egypt and Tunisia (2015). Data on Bahrain, Kuwait, Libya, Morocco, Oman, Qatar, Somalia, Syria and the UAE were not available.

Pre-COVID-19 data show wide variations in the proportion of population living below national poverty lines between different Arab States (**Figure 6**). Peri-COVID-19 modelling scenarios on global and regional extreme poverty suggest that vulnerable populations are at higher risk of falling into poverty due to the income losses associated with the pandemic. For example, country-level data from Morocco, using an expenditure threshold of $5.50 PPP, have shown that the number of people not in poverty who are vulnerable to falling into it could increase to 27 percent of the population by 2020, equivalent to almost 10 million Moroccans at risk (United Nations Country Team (Morocco), 2020). Data from Morocco also indicate that informal workers, who make up the majority of Moroccan workers, as well as gig economy workers and workers unable to work remotely, are likely to bear the brunt of the impact (United Nations Country Team (Morocco), 2020). This includes a population of 10,810 refugees and asylum-seekers, who mostly work in these sectors, as well as women, who occupy 12.7 percent of jobs in these sectors. Persons holding cards for the country's subsidized health insurance scheme (Régime d'Assistance Médicale aux Economiquement Démunis [Regime for Medical Assistance to the Most Deprived] – RAMED) also represent 15.1 million people at risk of increased vulnerability (United Nations Country Team (Morocco), 2020).

In Jordan, an impact study showed that poverty at the national poverty line is estimated to have increased by 23 percentage points among Jordanians and 12 percentage points among Syrian refugees by the end of 2020 (UNHCR and World Bank, 2020). This increase results in at least 1.5 million newly poor Jordanians, and more than 76,000 newly poor Syrian refugees, with the impact projected to last for 12 months. The relatively smaller increase in poverty among Syrian refugees is due to the large number of Syrian refugees already living under the poverty line in Jordan (UNHCR and World Bank, 2020).

Host populations in the Kurdistan region of Iraq face similar increases in poverty levels among refugee and IDP populations. Increases in poverty at the national poverty line of five percentage points are expected for host populations, six percentage points for refugee populations, and five percentage points for IDP populations at the end of 2020 (UNHCR and World Bank, 2020).

In Lebanon, the same study found that, by the end of 2020, poverty would have increased by 54 percentage points according to the national poverty line. Syrian refugees in Lebanon, many of whom were already clustered just above the international poverty line, also face an increase in poverty of up to 56 percentage points. The impact of COVID-19 is also compounded by the ongoing economic crisis, inflation, and the effects of the explosion at the Port of Beirut in August 2020, with the impact therefore projected to last beyond 2021 (UNHCR and World Bank, 2020).

Country-level data from Tunisia (ElKadhi and others, 2020) and Egypt (Breisinger and others, 2020) both indicate that higher-income households are expected to experience the largest absolute income losses, but poorer households will be impacted more severely in relative terms. Increased food prices and inflation are likely to cause additional impacts on purchasing power and poverty, [9] with food price inflation recorded at 6 percent in Tunisia (April 2020) and 2.8 percent in Egypt (December 2020) (Nordea Trade, 2021; Central Bank of Egypt, 2020; Gad, 2021). A survey conducted by the Central Agency for Public Mobilization and Statistics (CAMPAS) showed that income had fallen for 73 percent of Egyptian households in the sample, and many had reduced consumption of high-cost foods, including meat and fruit (Gad, 2021). In addition, purchasing power in Egypt is likely to be further impacted by the fact that pre-pandemic cash transfers have not been adjusted to inflation (Central Agency for Public Mobilization and Statistics, 2019). In Tunisia, too, where the poorest households have the largest share of food expenditure, this segment of the population is expected to be the most affected by COVID-19-related food price increases (Kokas and others, 2020).

Urban non-poor households in Egypt are expected to lose 740 Egyptian pounds (EGP) or 8.8 percent of income, but urban poor households, estimated to lose 271 EGP, are set to lose 9.7 percent of household income (Breisinger and others, 2020). On average, urban households in Egypt face a greater loss in income due to the country's reliance on industrial and service sectors, often located in urban areas and subject to closures. Lower losses in rural areas are attributed to expected growth in the agricultural sector due to the growth that was already occurring pre-COVID-19, as well as government encouragement to produce more livestock and dairy to make up for expected reductions in imports (Breisinger and others, 2020). In the case of Tunisia, urban households also face greater losses for similar reasons (ElKadhi and others, 2020).

Target 1.4. By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

Indicator 1.4.1. Proportion of population living in households with access to basic services

Indicator 1.4.2. Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure

No regional-level data are currently available for the pre-COVID-19 periods. Some country-level data are available for indicator 1.4.1 in the context of the pandemic. The missing data on the indicators for target 1.4 also reduce our understanding of some of the potential implications of the COVID-19 shock on poverty in the region.

In terms of indicator 1.4.1 on meeting basic needs, a rapid assessment of households in Jordan conducted by UNDP in May 2020 revealed that close to three quarters of respondents (72.5 percent) indicated having difficulties covering basic needs (rent, food, heating and medicine) due to the pandemic-related containment measures in place at the time of the survey (UNDP, 2020c).

Furthermore, in conflict-affected countries, the cost of sustaining humanitarian assistance is rising as a result of the pandemic and pandemic-related containment measures, including restrictions on travel and disrupted health care systems (ESCWA and UNSDG, 2020). This additional strain on and obstructions to the flow of assistance may result in reduced access to humanitarian assistance and necessary health care by vulnerable populations. For example, the reduction in the supply of and access to basic amenities in Syria has resulted in an increase in the price of these goods and services, including water, sanitation and hygiene (WASH) supplies and medicines (United Nations Office for the Coordination of Humanitarian Affairs [OCHA] and World Health Organization [WHO], 2020).

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[9] The effect of the increase in food prices on food security and nutrition is explored further in the **chapter on SDG 2.**

Target 1.5. *By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters*

Indicator 1.5.2. Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)

Progress on target 1.5 varies significantly across the Arab region, with Arab LDCs experiencing disproportionally high levels of direct economic loss due to disasters compared with GCC, Mashreq, and Maghreb countries. In addition, most country-level data available are out-of-date, and data from Syria and Yemen were collected prior to the respective crises in these nations. Current and up-to-date data could provide insight into Arab countries' preparedness and resilience to future shocks, including the COVID-19 pandemic.

SDG 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Background: Food and nutrition security in the Arab Region

According to the ASDR, many countries in the Arab region are characterized by low agricultural productivity, unsustainable agricultural practices, and heavy reliance on food imports (and thus on global trade) (ESCWA, 2020b). Prior to the pandemic, the region had the highest rate of food imports in the world, accounting for 25 percent of the wheat imports traded on the global market. Consequently, the long-term availability and affordability of food in the region were compromised during the pandemic. Food insecurity and undernourishment were further exacerbated by water scarcity, climate change, urbanization and conflict, with two thirds of the people who are hungry residing in conflict-affected countries (ESCWA, 2020b).

Arab countries' reliance on food imports renders them particularly vulnerable to trade imbalances and shocks, which directly affects their ability to access food staples in a sustainable manner (ESCWA, 2020b). The economic shock caused by the COVID-19 pandemic will have direct implications on food security in the region.

Malnutrition exists within the Arab region in both extremes, including undernutrition, micronutrient deficiencies, obesity and dietary excess (Ghattas and others, 2020). This is particularly important as SDG 2 refers to ending malnutrition in all its forms, including wasting, stunting, overweightness and obesity and micronutrient deficiencies. In the Arab region, adult obesity is particularly elevated. Obesity is a risk factor for many non-communicable diseases (NCDs) and for COVID-19-related mortality (Williamson and others, 2020). The resulting overlapping burdens of different types of malnutrition that exist across the region and among communities, households and individuals indicate both inequitable food availability and allocation, as well as poor-quality diets.

COVID-19 shock

The pandemic has disrupted global supply chains, including the production, transportation and distribution of food products. The pandemic containment measures, as well as the global economic downturn, have led to lower food exports due to aggressive food stockpiling by food-producing countries, food shortages and food price increases, with knock-on effects on food and nutrition security (Mardones and others, 2020; Ebata, Nisbett and Gillespie, 2020).

The implications of these disruptions are variable: despite vulnerability to global market shocks and disruptions, countries in the Near East and North Africa (NENA)[10] region have satisfactory food and staple reserves. However, countries affected by conflict, such as Yemen and Syria, are at higher risk of increasing food insecurity[11] (Food and Agriculture Organization [FAO], 2020).

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[10] The Near East and North Africa (NENA) region is defined by the FAO as including the following countries: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, the UAE and Yemen. Although this region includes Iran (a non-Arab State) and does not cover all Arab States covered in this report, it is used in this paper due to the significant regional overlap with the Arab region.
[11] See **Appendix 1** for the effects of market disruption on different subregions.

Mediating factors

Poverty (SDG 1) directly affects components of food security, including access to and affordability of food of nutritious value, as well as access to health care. As a result of increasing poverty, food insecurity is expected to increase, leading to an additional 1.9 million people becoming undernourished across the region (FAO and others, 2020).

Disrupted health services (SDG 3) are expected to negatively affect progress on SDG 2 indicators. Pandemic containment measures may lead to interrupted continuity and delivery of essential nutrition services for pregnant women, mothers, infants, and children (United Nations Children's Fund [UNICEF] and WHO, 2020). Interruptions in these key services can have both short and long-term consequences on nutritional status and health.

School closures (SDG 4) also impact children's food insecurity (ESCWA, 2020f). Algeria, Egypt, Jordan, Lebanon, Morocco, Sudan, Syria, Tunisia and Yemen have pre-existing school feeding programmes which have been impacted by school closures (WFP, 2017).

Scope

The targets and indicators chosen for the study of the impact of COVID-19 on SDG 2 relate to food and nutrition security, and reflect those covered by the MPI.

SDG 2 target	Indicator
Target 2.1. *By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round*	**2.1.1.** Prevalence of undernourishment
	2.2.2. Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
Target 2.2. *By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutrition needs of adolescent girls, pregnant and lactating women and older persons*	**2.2.1.** Prevalence of stunting (height for age ‹-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under five years of age
	2.2.2. Prevalence of malnutrition (weight for height ›+2 or ‹-2 standard deviation from the median of the WHO Child Growth Standards) among children under five years of age, by type (wasting and overweight)

Section 1: The pandemic and containment measures will have a considerable impact on nutrition in the Arab region

Target 2.1. By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Indicator 2.1.1. Prevalence of undernourishment

Indicator 2.1.2. Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

Prevalence of undernourishment

Prior to the pandemic, undernourishment in the Arab region affected around 50 million people, with a prevalence of undernourishment (PoU) equivalent to around 12 percent of the population. The PoU regional average was higher than the global average of 10.8 percent and was on the increase before the pandemic, having risen from 11.5 to 12.1 percent between 2010 and 2016 (ESCWA, 2020b). Large disparities in PoU currently exist between countries in the region, with undernourishment highly prevalent in least developed and conflict-affected countries. In 2017, Yemen, Iraq and Sudan reported PoU at 38.9, 29 and 20.1 percent, respectively, while the PoU in GCC countries like Kuwait and the UAE was as low as 2.8 and 2.6 percent, respectively (UNDP, 2020c; World Bank, 2021a). Climate change and related events such as droughts have also placed populations across the region at greater risk of undernourishment (ESCWA, 2020b) with those residing in rural areas at greatest risk.

An additional 1.9 million people in the region are expected to become undernourished due to the pandemic (ESCWA, 2020f). It is estimated that an extra 4.3 million people will become malnourished in 2020 with 48 million people being classified as malnourished during 2018 (UNDP, 2020b). This led to a 3.8 percent increase in the regional PoU to 12.5 percent. A simulation conducted by FAO in 2020 produced estimates of rising PoU in 118 low- and middle-income and net food-importing countries, including 15 Arab countries (**Figure 7**; Conti, Cafiero and Sánchez, 2020).[12] The simulation covered three hypothetical scenarios of GDP reduction due to COVID-19 and their effect on food supply and therefore food security and PoU. The modelling showed that even the most optimistic scenario of impact on GDP growth resulted in an increase in PoU in all countries, and that low-income food-deficit countries (LIFDCs), including Djibouti, Somalia, Sudan, Syria and Yemen as LIFDCs in the Arab region (marked with an asterisk) would be the most affected due to their increased vulnerability (**Figure 7**).

Figure 7. Estimated prevalence of undernourishment according to the Food and Agriculture Organization simulation of three hypothetical scenarios (2020)
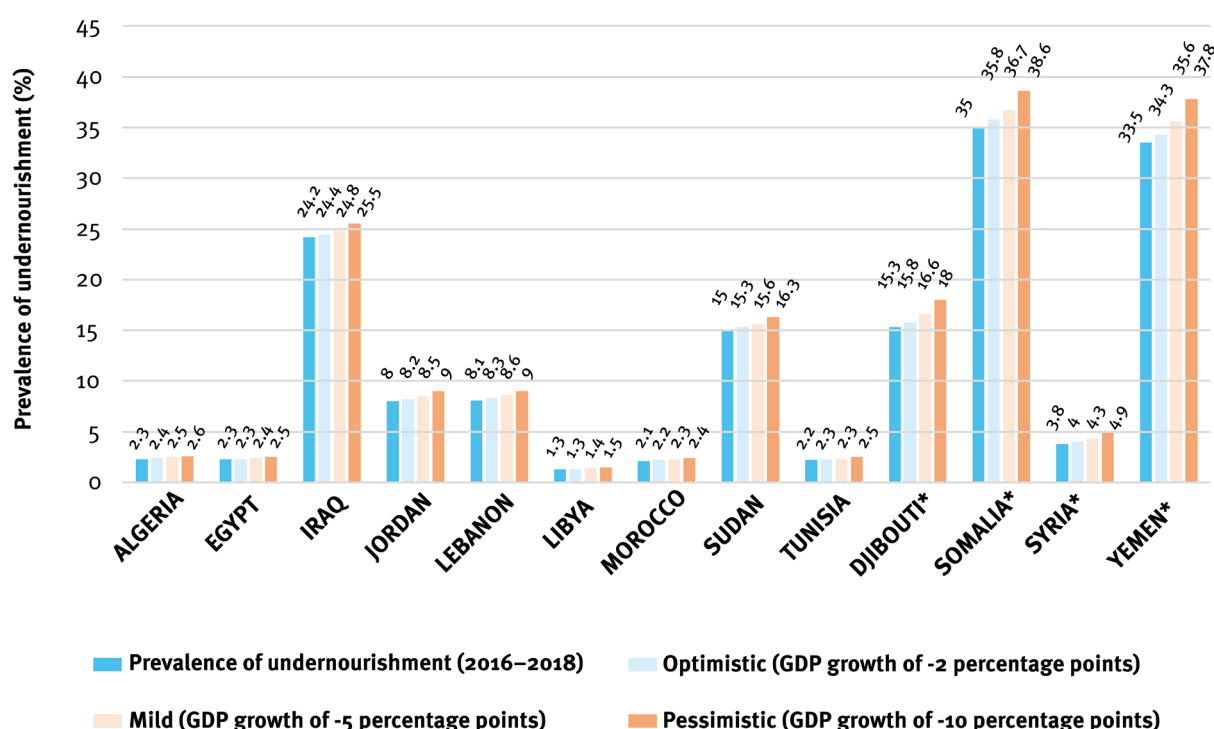
Source: Conti, Cafiero and Sánchez (2020).
*Note*s: Data for Bahrain, Kuwait, Oman, Palestine, Qatar and Saudi Arabia were not available. Countries marked with an asterisk are low-income food-deficit countries.

Food insecurity

[12] See Appendix 1 for data.

In 2016, food insecurity measured using the FIES was affecting 12.2 percent of the population in the Arab region, with 50 million people in the region reporting food insecurity (ESCWA, 2019). In comparison, the world average before the pandemic stood at 9.2 percent. Significant disparities existed between countries before the pandemic. The prevalence of moderate or severe food insecurity was 7.3 percent in GCC countries, 4.7 percent in Maghreb countries, and 11.3 percent in Mashreq countries, with some countries such as Egypt and Palestine recording extremely high country-level data for prevalence of moderate or severe food insecurity in the adult population, at 36 and 30 percent, respectively (**Figure 8**; FAO and others, 2020; World Bank, 2021a).

Figure 8. Prevalence of moderate or severe food insecurity in Arab countries (2017–2019)
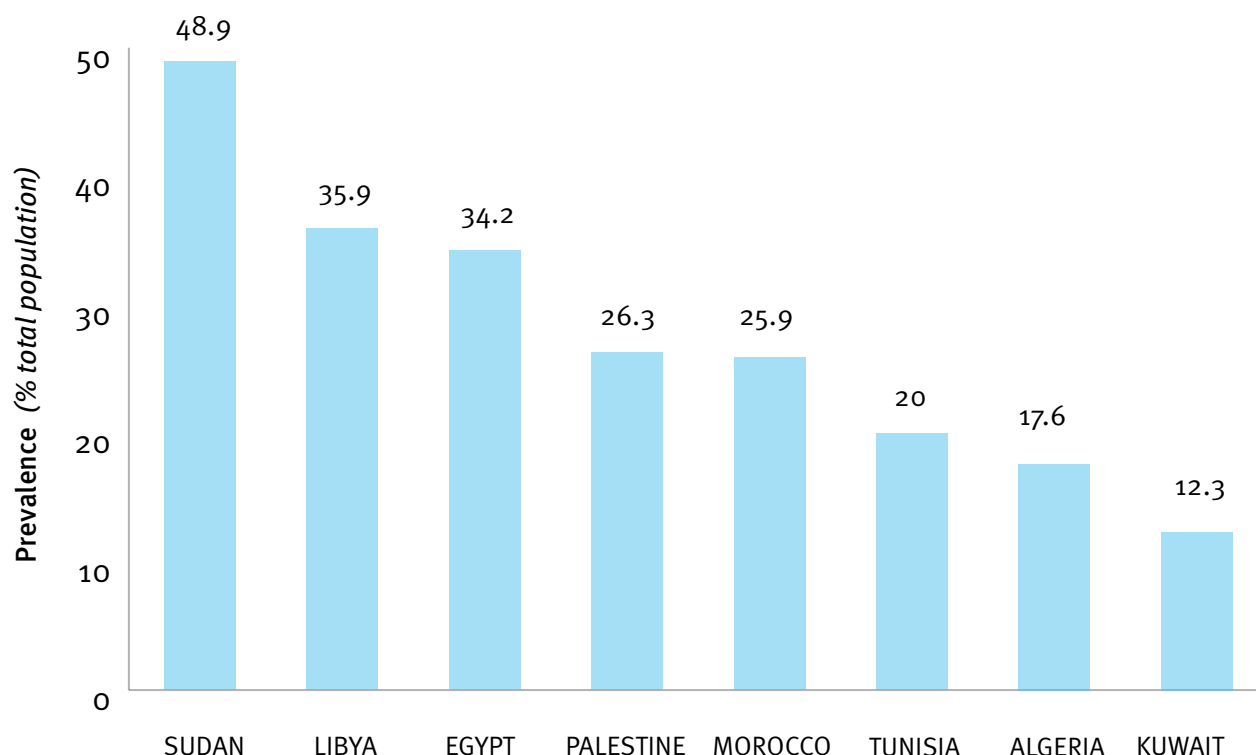
Source: FAO and others (2020).
Note: Data on Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Somalia, Syria, the UAE and Yemen were not available.

The COVID-19 pandemic is expected to exacerbate food insecurity by disrupting the availability of and access to food, and therefore food prices, as well as by exacerbating other mediating factors such as poverty. Conflict-affected countries are also at higher risk: in Yemen and Syria, 15.9 million people (53 percent of the population) and 9.3 million people (50 percent of the population), respectively, were classified as being "in crisis" prior to the pandemic using the Integrated Food Security Phase Classification[13] (ESCWA, 2020e). Syria witnessed significant food price increases as well as some shortages of basic goods and food staples beginning mid-March 2020—by July 2020, the average food basket price had increased by 200 percent compared with June 2019 (OCHA and WHO, 2020; FAO, 2020).[14]

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[13] Integrated Food Security Phase Classification (IPC) combines the indicators of food consumption, livelihoods, malnutrition, and mortality to classify households and areas according to a five-phase scale that assesses the severity of acute food insecurity. These are largely used in emergency contexts to track food insecurity and its drivers and contribute to famine early warning systems. These indicators are different from the SDG 2 indicators of food insecurity (PoU and FIES), which measure medium- to long-term trends and are therefore more indicative of chronic food insecurity.

[14] See **Box 1**.

Box I

Figure 9 presents recent data on food insecurity during the pandemic and peri-lockdown period in different Arab States. In addition, it highlights emerging concerns related to increasing rates of food insecurity in Lebanon and Yemen, and to a certain extent in Jordan, as well as some of the dietary changes that occurred as a result of the lockdowns. Since the case studies from Jordan, Lebanon and Saudi Arabia are the result of online surveys, they are not representative of the whole population and therefore should not be generalized.

The case study on Saudi Arabia sheds light on how different segments of the population experience the impact of COVID-19 on food security differently. In food-secure groups, the COVID-19 pandemic and pandemic-related containment measures disrupted healthy eating efforts and increased the risk of micronutrient deficiencies and obesity (**Figure 8**). In this case, the utilization component of food security is threatened in groups that were already food-secure. On the other hand, the components of access to food appear to be more endangered in groups with higher pre-existing vulnerability. The effects food security has on the SDG 2 targets also affect progress towards SDG 3 targets, particularly indicator 3.4.1. related to NCDs. The Saudi Arabia case study shows the simultaneous and multilayered impact of COVID-19 on various dimensions of health and food insecurity.

The Jordan study, on the other hand, draws a link between SDG 1 targets and indicators and their effects on food security. Findings of the study showed that income poverty (monthly income below the poverty line) correlated with higher food insecurity. It also shows a correlation between asset poverty and food insecurity, with respondents who rented their homes reporting higher levels of food insecurity.

Other cases such as Lebanon and Yemen illustrate the effect of compounding vulnerabilities on food insecurity. The ongoing economic crisis in Lebanon showed the link between SDG 8 progress with food insecurity indicators: newly unemployed respondents of Lebanese, Palestinian and Syrian nationalities reported higher levels of worry about access to food than those not newly unemployed. In addition, households that were in debt or that relied on day labour were more likely to report food-based coping strategies such as skipping meals. In Yemen, conflict has already resulted in food price increases, a reduction in agricultural production and caused shortages in food supply; as a result, the pandemic will only exacerbate these underlying vulnerabilities and push Yemen further into acute food insecurity.

Figure 9. Experience of food insecurity across selected Arab States during the COVID-19 pandemic

LEBANON: A double crisis

In Lebanon, an existing economic crisis has been exacerbated by the COVID-19 pandemic. In April and May 2020, the World Food Programme conducted an online survey of Lebanese and Syrian refugees, as well as Palestinian refugees residing in Lebanon, to understand the effects of these compounded crises on livelihoods and food security (World Food Programme, 2020).

- **Price inflation of food** impacted households' **access** to food, whereas prohibitive pricing led to **41 percent** of Lebanese refugees, **44 percent** of Palestinian refugees and **64 percent** of Syrian refugees being unable to stockpile food items.

- Food insecurity played a significant role, **with 50 percent** of Lebanese refugees, **63 percent** of Palestinian refugees and **75 percent** of Syrian refugees reporting being worried that they may not be able to access enough food for the coming one-month period. The highest levels of worry were reported among those who were **newly unemployed**.

- High food insecurity led to food-based coping strategies such as skipping meals, with **11 percent** of Syrian refugees reporting skipping meals for 24 hours. Households with **debt** or that rely on **day labour** reported higher levels of food-based coping strategies

SAUDI ARABIA: Disrupted eating habits

An online survey of 879 adults living in Saudi Arabia assessed changes in eating habits due to the 24-hour curfew put in place as a COVID-19 containment measure. Among those surveyed, the **prevalence of food insecurity** was **37.7 percent**, with **17.0 percent** of participants reporting moderate or severe food insecurity. Lockdown-induced changes in eating habits were examined in all groups. The results of the study illustrated the differential outcomes of the same stressor on eating habits by food insecurity status.

- Food-insecure groups reported **anxiety caused by food unavailability** and changes in both mealtimes and meal frequencies

- Food-secure groups reported a significant increase in the consumption of foods of **low nutritional quality** including sweet and savoury snacks.

- Food-secure groups reported a mean **weight increase** of 1 kg in less than one month, while mild food-insecurity groups reported a mean weight increase of around 1.5 kg, despite their food intake remaining the same throughout. This is particularly concerning in a context of existing high rates of overweightness and obesity.

- LEBANON: A doube crisis
- JORDAN: The profile of the food-insecure
- SAUDI ARABIA: Disrupted eating habits
- YEMEN: Conflict and acute food insecurity

LEGEND

- ▬ **LEBANON: A doube crisis**
- ▬ **JORDAN: The profile of the food-insecure**
- ▬ **SAUDI ARABIA: Disrupted eating habits**
- ▬ **YEMEN: Conflict and acute food insecurity**

JORDAN: A profile of food-insecure people

A cross-sectional online survey of 3,129 Jordanians assessed food insecurity and diet diversity during the first four weeks of COVID-19-related closures in Jordan (in March and April 2020).

The survey found that **23.1 percent** of respondents were experiencing **severe food insecurity** and **40 percent** were **food secure**. The food insecurity figures are high compared with previously reported rates in the country.

- ■ **Poverty** (monthly income per-capita below the poverty line) and larger household size correlated strongly with **moderate and severe food insecurity**.

- ■ **Age** (18–30-year-olds experienced significantly higher food insecurity than other age groups) and living in **rented accommodation** correlated strongly with **severe food insecurity**.

- ■ The **availability and access** to cereals and grains was linked to government subsidies on breads and bakeries being permitted to remain open 24 hours a day at the beginning of the lockdown. Food-insecure groups had a higher reliance on cereals and grains and a low meat intake. A high frequency of food intake was found among these groups. About 79 percent of severely food-insecure people did not consume any meat, poultry or fish during the lockdown, but the consumption of other food groups varied depending on the status of food insecurity. This is due to the Government of Jordan prohibiting food commodity price increases and permitting people to shop at food outlets located within walking distance from their homes.

YEMEN: Conflict and acute food insecurity

In Yemen, the number of people facing high levels of acute food insecurity is predicted to increase from 2 million to 3.2 million by early 2021 (UNICEF, 2020). This means an increase from 25% of people facing acute food insecurity (in February-April) to and estimated 40% of the population by December 2020 is projected even if humanitarian food assistance is maintained (UNICEF, 2020).

Shortages in perishable food commodities of high nutritional value (such as fruit and milk) and food price increases were reported as of April 2020. Price increases and shortages affect both the accessibility and availability components of food security. Shortages and agricultural production will aslo be impacted by supply chains disruptions, which are predicted to be severe in countries affected by conflict (FAO, 2020).

Source: Snapshots of country data from different studies from Lebanon (WFP, 2020a); Saudi Arabia (Mumena, 2020), Yemen (FAO, 2020; UNICEF Yemen, 2020) and Jordan (Elsahoryi and others, 2020).

Section 2: The pandemic will lead to a rise in malnutrition in children across the Arab region

The percentage of malnourished children in Arab States according to three scenarios (a no COVID-19 scenario, a COVID-19 baseline scenario and a high damage scenario) in 2018, 2020 and 2030 is presented in **Table 4** (UNDP, 2020b). In 2018, there were an estimated 6 million malnourished children in the Arab region and this was expected to increase by 120,000 children in 2020 (in the COVID-19 baseline scenario) (UNDP, 2020f). The data show a projected decrease in child malnutrition across most Arab States (with the exception of Palestine) in the no COVID-19 scenario. However, significant inequalities exist between countries, with Arab LDCs (Djibouti, Somalia, Sudan and Yemen) having extremely high percentages of child malnutrition in comparison with the rest of the Arab States. This pre-existing high level of child malnutrition makes these countries more vulnerable to a COVID-19 shock. In almost all countries the percentage of child malnutrition is expected to decrease by 2030, including in the high damage scenario.

Table 4. Percentage of malnourished children in Arab States according to the three COVID-19 impact scenarios during 2018 and 2020, and projected for 2030

Percentage of malnourished children in Arab states		2018	2020	2030
ALGERIA	No COVID scenario	2.968	2.945	2.959
	COVID-19 baseline scenario	2.968	2.985	2.944
	High damage scenario	2.968	2.993	-
BAHRAIN	No COVID scenario	7.328	7.252	6.904
	COVID-19 baseline scenario	7.328	7.342	6.923
	High damage scenario	7.328	7.362	6.981
DJIBOUTI	No COVID scenario	30.86	35.67	15.06
	COVID-19 baseline scenario	30.86	38.2	15.68
	High damage scenario	30.86	38.3	20.35
EGYPT	No COVID scenario	6.695	6.52	6.176
	COVID-19 baseline scenario	6.695	6.542	6.224
	High damage scenario	6.695	6.556	6.32
IRAQ	No COVID scenario	5.053	4.891	4.187
	COVID-19 baseline scenario	5.053	5.019	4.311
	High damage scenario	5.053	5.032	4.639
JORDAN	No COVID scenario	2.978	2.979	2.823
	COVID-19 baseline scenario	2.978	3.016	2.85
	High damage scenario	2.978	3.024	2.918
KUWAIT	No COVID scenario	3.5	3.458	3.289
	COVID-19 baseline scenario	3.5	3.531	3.294
	High damage scenario	3.5	3.639	3.333
LEBANON	No COVID scenario	4.262	4.56	4.236
	COVID-19 baseline scenario	4.262	4.856	4.318
	High damage scenario	4.262	4.937	5.186
LIBYA	No COVID scenario	10.62	10.23	9.132
	COVID-19 baseline scenario	10.62	10.17	8.089
	High damage scenario	10.62	10.17	7.862
MOROCCO	No COVID scenario	2.663	2.589	2.423
	COVID-19 baseline scenario	2.663	2.638	2.487
	High damage scenario	2.663	2.645	2.568
OMAN	No COVID scenario	9.925	9.751	8.882
	COVID-19 baseline scenario	9.925	10.8	8.734
	High damage scenario	9.925	11.02	8.997

Percentage of malnourished children in Arab states		2018	2020	2030
PALESTINE	No COVID scenario	1.987	1.987	2.013
	COVID-19 baseline scenario	1.987	2.084	1.983
	High damage scenario	1.987	2.134	2.057
QATAR	No COVID scenario	4.694	4.631	4.239
	COVID-19 baseline scenario	4.694	4.7	4.201
	High damage scenario	4.694	4.714	4.24
SAUDI ARABIA	No COVID scenario	5.191	5.167	5.162
	COVID-19 baseline scenario	5.191	5.232	5.138
	High damage scenario	5.191	5.245	5.213
SOMALIA	No COVID scenario	22.38	24.44	17.27
	COVID-19 baseline scenario	22.38	25.29	18.61
	High damage scenario	22.38	25.52	19.6
SUDAN	No COVID scenario	31.27	29.94	24.76
	COVID-19 baseline scenario	31.27	30.31	24.3
	High damage scenario	31.27	30.39	25.77
SYRIA	No COVID scenario	9.453	9.158	7.98
	COVID-19 baseline scenario	9.453	9.157	7.937
	High damage scenario	9.453	9.183	7.966
TUNISIA	No COVID scenario	1.975	1.948	1.982
	COVID-19 baseline scenario	1.975	1.983	1.971
	High damage scenario	1.975	1.988	2.055
UNITED ARAB EMIRATES	No COVID scenario	1.967	1.936	1.926
	COVID-19 baseline scenario	1.967	1.969	1.937
	High damage scenario	1.967	1.982	1.967
YEMEN	No COVID scenario	43.69	43.52	31.75
	COVID-19 baseline scenario	43.69	43.89	37.96
	High damage scenario	43.69	43.97	40.48

Source: UNDP (2020b).
Notes: The no COVID-19 scenario shows the progress of these countries before the pandemic; the COVID-19 baseline scenario is based on known data on the impact of COVID-19 up to 2020; and the high damage scenario is a pessimistic scenario. Missing data indicated by a dash.

Target 2.2. By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutrition needs of adolescent girls, pregnant and lactating women and older persons

Indicator 2.2.1. Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

The last regional average (2015) for stunting in the Arab region, pre-COVID-19, stood at 24.4 percent, slightly lower than the world average of 28 percent (ESCWA, 2020b). However, as with most food security indicators, there were significant disparities in the rate of stunting between regions and countries. For example, 37.6 percent of children under 5 years of age in Arab LDCs are affected by stunting (ESCWA, 2020b), but other countries outside this group have also recorded high rates, including Egypt, with a prevalence of stunting of 22.3 percent of children under 5 years of age (**Figure 10**; FAO and others, 2020).

Figure 10. Prevalence of under-five stunting (2019)
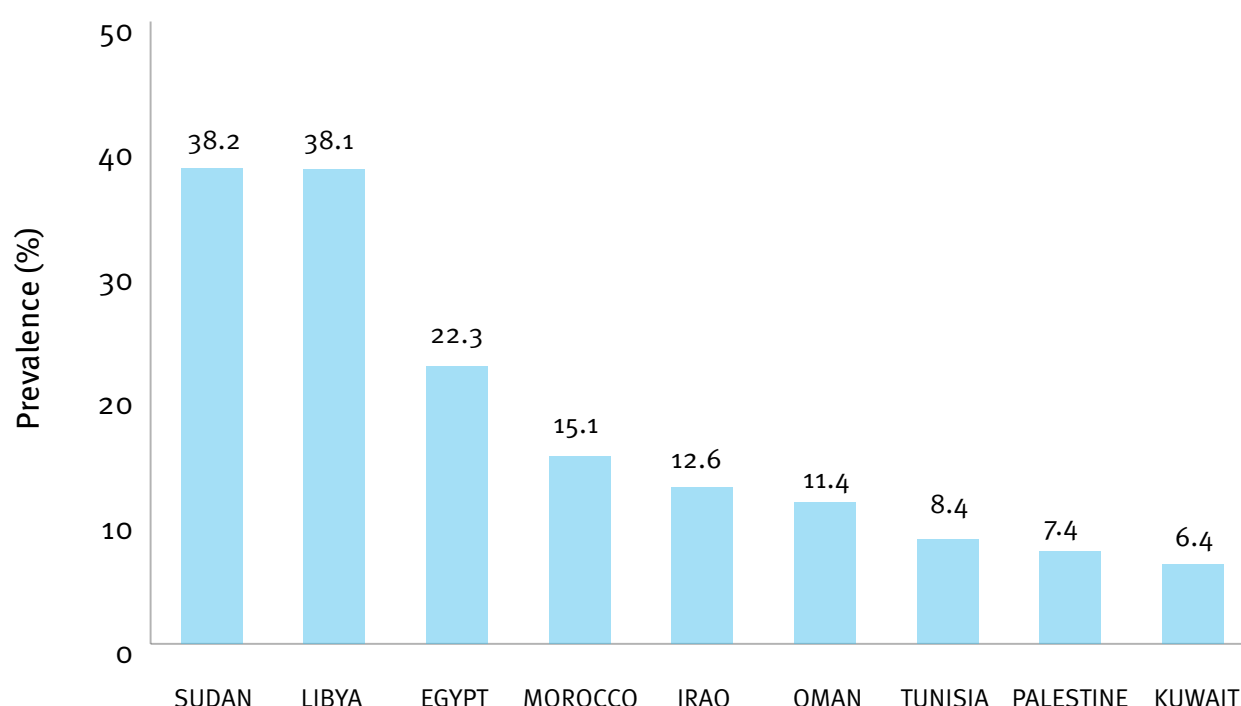
Source: FAO and others (2020).
Note: Data on Algeria, Bahrain, Djibouti, Jordan, Lebanon, Qatar, Saudi Arabia, Somalia, Syria, UAE and Yemen were not available.

The COVID-19 pandemic and its impact on the access to and affordability and availability of food with a high nutritional value threatens to undermine efforts to reduce stunting (UNICEF and WHO, 2020). The disrupted access to health care is also expected to affect the indicators under target 2.2. Prevalence of stunting is inversely linked to the Human Development Index (HDI) of a country (UNICEF and WHO, 2020). Given the lack of data available, this inverse relationship could possibly be used to predict the potential effects of COVID-19 on SDG indicator 2.2.1 in the region.

Disruptions to the health sector have also affected nutrition and food security. The purposeful avoidance of routine health care, due to pandemic containment and prevention measures, is likely to reduce access to nutrition-based health care interventions. These interventions include screening and treatment of malnutrition, micronutrient supplementation for pregnant women and infants, counselling and support for infant and young child feeding, growth monitoring and the nutritional management of NCDs.

In addition, the diversion of health resources, including human resources, to combating COVID-19 also reduces the availability of routine nutrition services.[15]

Indicator 2.2.2. Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (**wasting** and **overweight**)

Wasting

The prevalence of under-five wasting during 2019 in the Arab region was 9.6 percent, which was similar to the global average (9.4 percent), with disparities across countries. LDCs had a high proportion of wasting at 16 percent, while both Maghreb and GCC regions had a lower prevalence at 3.3 percent and 5.5 percent, respectively (**Figure 11**; ESCWA, 2020b).

Figure 11. Prevalence of under-five wasting (2019)
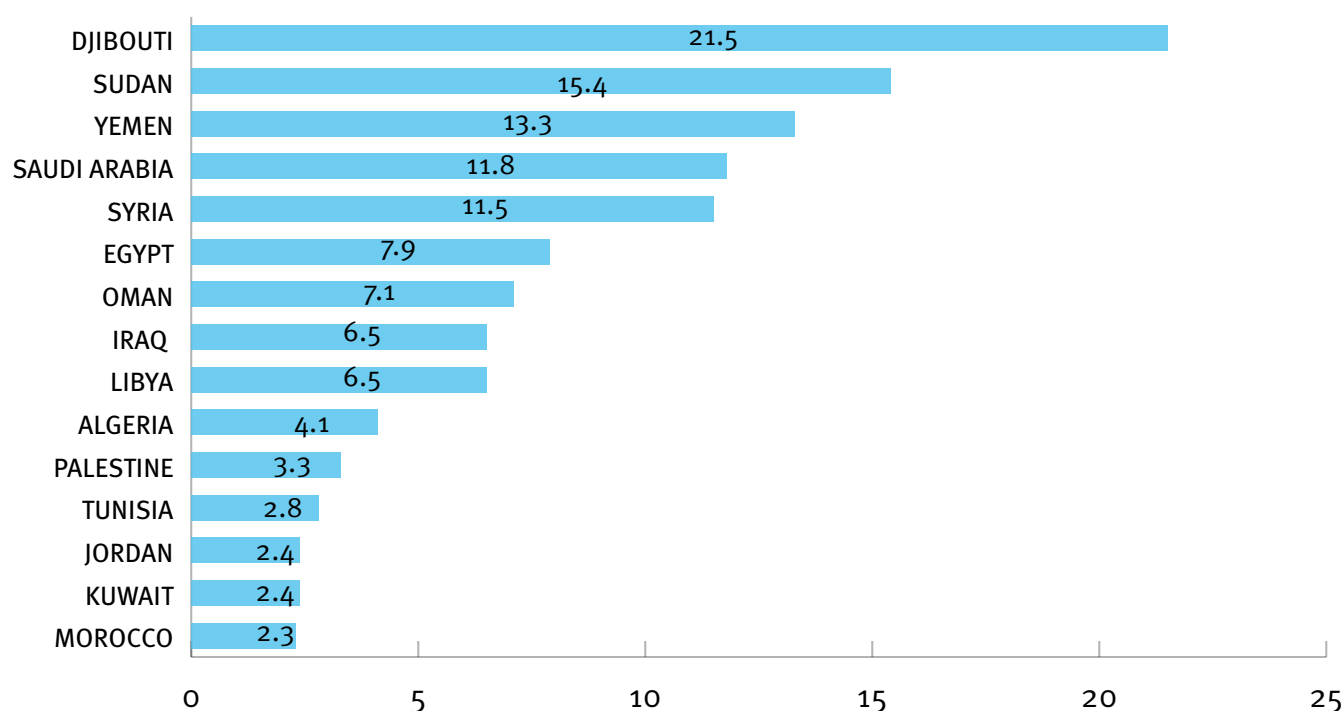
Source: FAO and others (2020).
Note: Data on Bahrain, Lebanon, Qatar, Somalia and the UAE were not available.

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[15] See **SDG 3** for more on interruption of health services.

Estimates from modelling of the Eastern Mediterranean Region[16] (EMR)/Arab region showed that between 11,000 and 51,000 children under five years of age could die in 2020 due to wasting caused by the impact of the pandemic on access to food and health care (**Figure 12**; UNICEF and WHO, 2020).

Figure 12. Estimated under-five excess deaths over a six-month period according to the three COVID-19 impact scenarios
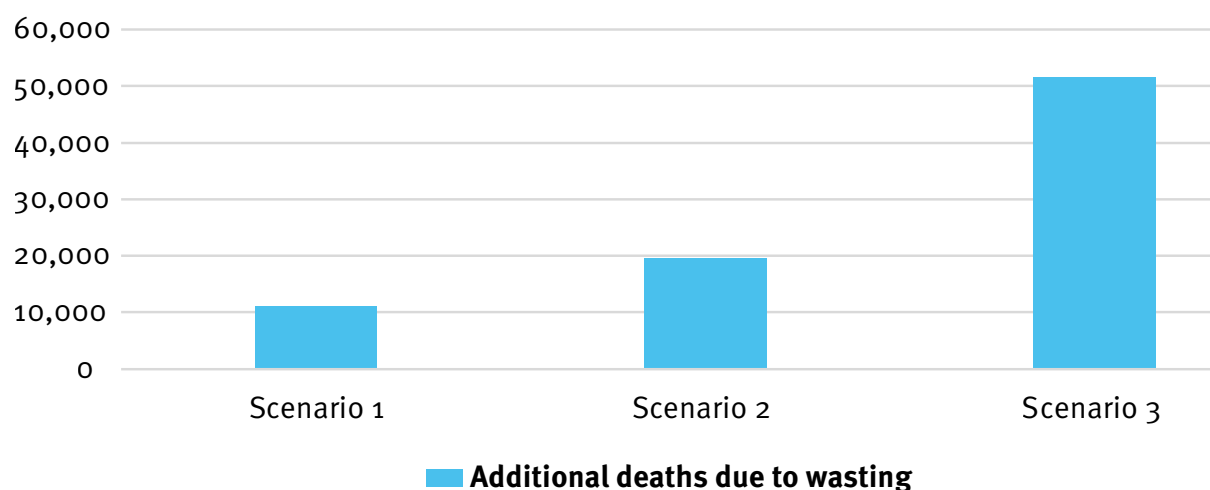
Source: Robertson and others (2020); UNICEF and WHO (2020).
Note: Scenarios are presented in **Appendix 1, Annex 3**.

In Yemen, an additional 30,000 children were predicted to develop life-threatening severe acute malnutrition during 2020, and the overall number of malnourished children under five years of age is predicted to increase by around 20 percent to a total of 2.4 million (UNICEF Yemen, 2020). Furthermore, 500,000 pregnant and breastfeeding mothers will be unable to access essential nutrition support, including counselling on breastfeeding and young child feeding, and access to supplements such as folic acid and iron (UNICEF Yemen, 2020).

Overweightness

In the Arab region, 10 percent of children are moderately or severely overweight, whereas the world average is 5.0 percent, with large disparities between countries. Mashreq and Maghreb countries had high proportions of moderately or severely overweight children (14.1 and 12 percent, respectively), while GCC countries and LDCs had a considerably lower average of 5.1 and 2.7 percent, respectively (ESCWA, 2020b). Few data currently exist regarding overweight children in the peri-COVID-19 period. However, unhealthy behaviours, including poor diets and a lack of physical activity, have increased during the pandemic, which are likely to increase the prevalence of childhood obesity (Cuschieri and Grech, 2020; Chung and others, 2020).

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[16] The Eastern Mediterranean Region (EMR) is a regional grouping used by WHO and covers Afghanistan, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen. Although this region includes the non-Arab States of Afghanistan, Iran and Pakistan and does not include all Arab States covered in this report, it is used here due to its significant regional overlap with the Arab region.

Vulnerability and exclusion: at risk of being left behind

In the Arab region, the **poor**, **refugees** and **displaced people** were already at risk of being left behind in the achievement of SDG 2 targets before the pandemic (ESCWA, 2020b). The COVID-19 pandemic threatens over 55 million people already in need of humanitarian assistance in the region, around 26 million of whom are forcibly displaced (refugees and IDPs). Of those 26 million forcibly displaced, nearly **16 million are moderately to severely food-insecure** (ESCWA, 2020f). In Lebanon, data collected between August and September 2020 showed that 96 percent of Syrian refugee households were food-insecure in 2020, with 49 percent of those experiencing moderate to severe food insecurity (WFP, UNHCR and UNICEF, 2020). In a survey conducted by WFP between mid-April and mid-May 2020, 50 percent of Lebanese, 63 percent of Palestinians and 75 percent of Syrians reported worrying that they may not be able to access enough food for the coming one-month period (WFP, 2020a).

Women in the Arab region are also particularly vulnerable to food insecurity (ESCWA, 2020b). **Female-headed households are at heightened risk** of having less access to food and nutrition due to having less access to employment, land ownership and opportunities (ESCWA, 2020b). In Jordan, **persons with disabilities** reported higher household food insecurity due to the pandemic (Humanity & Inclusion, 2020).

The pandemic is expected to have severe consequences on vulnerable groups, especially women, young adults, and workers in the informal sector, and could further compromise the food security of **population groups that have no access to social protection** (ESCWA, 2020f). These populations face compounding vulnerabilities and have limited ability and capability to buffer the impact of the pandemic on food security and nutrition (WHO, 2020d).

SDG 3. Ensure healthy lives and promote well-being for all at all ages

The COVID-19 pandemic has threatened progress towards SDG 3—ensuring healthy lives and promoting well-being for all at all ages. Combating the pandemic has become a global priority and attaining SDG 3 has become a secondary target. Health systems have prioritized the COVID-19 response and have been overwhelmed by both the preventive and curative response. Consequently, services for acute and chronic health conditions have been severely disrupted, which is likely to impact achievement of SDG 3 (Khetrapal and Bhatia, 2020).

Background: Health and well-being in the Arab region

According to the ASDR, many countries in the Arab region are characterized by fragmented and weak health systems (ESCWA, 2020b). Within countries, services are often distributed between a patchwork of public and private providers as well as non-governmental and military services (ESCWA, 2020b). The fragmentation of the health system and high out-of-pocket health expenditure has impeded the continuity of care and excluded vulnerable groups from access to high-quality care (ESCWA, 2020b). In addition, conflict settings have particularly weakened health systems, increased reliance on humanitarian assistance, insufficient medicine supplies and limited human resources. Consequently, these settings are unlikely to meet the SDG 3 indicators (Bendavid and others, 2021; Zablith and others, 2021; Ruby and others, 2015).

Primary and preventive health care is also weak in Arab States due the role of the private sector in health care provision, which favours secondary- and tertiary-level care[17] (ESCWA, 2020b). The under-prioritization of primary care and multisectoral determinants of health (social, economic and commercial determinants), and specifically, of preventive public health interventions targeting lifestyle and behaviour, places Arab populations at specific risk of developing NCDs (ESCWA, 2020b).

COVID-19 shock

While viral infection has a direct impact on mortality and morbidity, the COVID-19 pandemic and resulting containment measures exacerbate existing barriers to achieving SDG 3 for the health and well-being of the Arab region, particularly through impeding access to and disrupting the continuity of care. With primary and preventive health care systems already weakened across many countries, many populations are particularly vulnerable. In the Arab region, the levels of disruption varied by WHO subregion and income group. The EMR was the most affected region, followed by the African and the South-East Asia regions (WHO, 2020b).

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[17] Levels of health care include (1) primary, (2) secondary, and (3) tertiary, in increasing levels of specialization. Primary-level health care services are the least specialized and can include community services; secondary-level health care services are more specialized and can include general hospitals, whereas tertiary-level health care includes highly specialized services.

Scope

The targets and indicators chosen for the study of the impact of COVID-19 on SDG 3 relate to the dimension of mortality, and reflect the dimensions covered by the MPI (UNDP and OPHI, 2020).

SDG 3 target	Indicator
Target 3.1. By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	**3.1.1.** Maternal mortality ratio
Target 3.2. By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neo-natal mortality to at least as low as 12 per 1,000 live births and under-five mortality to at least as low as 25 per 1,000 live births	**3.2.1.** Under-five mortality rate
	3.2.2. Neonatal mortality rate
Target 3.4. By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	**3.4.1.** Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

Section 1: Pandemic containment measures will undermine access to essential health services for maternal and child health

Target 3.1. By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

Indicator 3.1.1. Maternal mortality ratio

Prior to the COVID-19 pandemic, Arab States had made progress towards reducing the maternal mortality ratio (MMR). The regional average stood at 142 deaths per 100,000 live births as at 2015, which was twice the SDG target of 70 per 100,000 live births (ESCWA, 2020b). However, considerable disparities exist between countries and the ratio is particularly high in conflict-affected countries. For example, in the UAE, the MMR was 3 per 100,000 live births in 2017, compared with a higher MMR of 829 and 164 per 100,000 in Somalia and Yemen, respectively (UNDP, 2020c; Central Statistical Organization and UNFPA Yemen, 2019). The average MMR for Arab LDCs was 493 deaths per 100,000 live births in 2015, which was the second highest mortality ratio of any region in the world (ESCWA, 2020b). Higher-income countries in the region have generally made more progress due to better access and quality of services; however, inequalities also exist within countries (UNICEF, 2020a). For example, in Lebanon, areas with larger populations of Syrian refugees, such as the north of Lebanon and Bekaa, have large numbers of maternal deaths (El-Kak and others, 2020).

Table 5 presents projections of the MMR in Arab States across three scenarios (a no COVID-19 scenario, a COVID-19 baseline scenario and a high damage scenario) in 2018, 2020 and 2030 (UNDP, 2020b). The projections show a variable impact of COVID-19 on the MMR. Mashreq countries (Jordan, Iraq, Lebanon and Syria) are projected to have an increase in their respective MMRs under the COVID-19 baseline scenario for the year 2020. There is likely to be little impact on the MMR in the GCC countries, while despite a high 2018 baseline, Arab LDCs show little or no increase in the MMR.

Table 5. Maternal mortality ratio in Arab States according to the three COVID-19 impact scenarios during 2018 and 2020, and projected for 2030

Maternal mortality ratio in Arab countries		2018	2020	2030
ALGERIA	No COVID scenario	107.8	99.98	60.66
	COVID-19 baseline scenario	107.8	106.3	62.61
	High damage scenario	107.8	107.5	67.98
BAHRAIN	No COVID scenario	4.621	4.404	4.254
	COVID-19 baseline scenario	4.621	4.768	4.254
	High damage scenario	4.621	6.096	4.254
DJIBOUTI	No COVID scenario	217.7	205.8	138.2
	COVID-19 baseline scenario	217.7	210.9	141.6
	High damage scenario	217.7	212.1	146.2
EGYPT	No COVID scenario	32.21	24	-
	COVID-19 baseline scenario	32.21	25.78	-
	High damage scenario	32.21	26.94	-
IRAQ	No COVID scenario	68.56	61.87	21.51
	COVID-19 baseline scenario	68.56	75.72	27.93
	High damage scenario	68.56	77.09	39.82
JORDAN	No COVID scenario	35.2	35.33	15.05
	COVID-19 baseline scenario	35.2	41.57	18.45
	High damage scenario	35.2	42.89	21.67
KUWAIT	No COVID scenario	11.64	11.46	10.56
	COVID-19 baseline scenario	11.64	11.46	10.56
	High damage scenario	11.64	11.46	10.56
LEBANON	No COVID scenario	36.97	41.1	9.401
	COVID-19 baseline scenario	36.97	65.95	11.19
	High damage scenario	36.97	67.64	29.78
LIBYA	No COVID scenario	37.9	32.89	-
	COVID-19 baseline scenario	37.9	30.57	-
	High damage scenario	37.9	30.55	-
MOROCCO	No COVID scenario	58.91	50.5	10.18
	COVID-19 baseline scenario	58.91	59.12	14.62
	High damage scenario	58.91	60.36	18.97
OMAN	No COVID scenario	27.24	29.48	10.45
	COVID-19 baseline scenario	27.24	40.92	14.32
	High damage scenario	27.24	42.28	27.7
PALESTINE	No COVID scenario	21.74	23.32	6.627
	COVID-19 baseline scenario	21.74	34.07	4.359
	High damage scenario	21.74	35.49	13.98
QATAR	No COVID scenario	8.76	8.64	8.04
	COVID-19 baseline scenario	8.76	8.64	8.04
	High damage scenario	8.76	8.64	8.04

Maternal mortality ratio in Arab countries		2018	2020	2030
SAUDI ARABIA	No COVID scenario	7.559	7.204	-
	COVID-19 baseline scenario	7.559	13.45	-
	High damage scenario	7.559	14.75	-
SOMALIA	No COVID scenario	759.2	723.5	540.8
	COVID-19 baseline scenario	759.2	726.9	546.1
	High damage scenario	759.2	728	549.5
SUDAN	No COVID scenario	276.7	269.3	202.2
	COVID-19 baseline scenario	276.7	274.5	200.9
	High damage scenario	276.7	275.7	208
SYRIA	No COVID scenario	20.51	15.32	-
	COVID-19 baseline scenario	20.51	15.3	-
	High damage scenario	20.51	16.48	-
TUNISIA	No COVID scenario	37.5	31.47	-
	COVID-19 baseline scenario	37.5	39.45	3.91
	High damage scenario	37.5	40.74	7.099
YEMEN	No COVID scenario	163.8	160.1	108.3
	COVID-19 baseline scenario	163.8	165.4	133.4
	High damage scenario	163.8	166.6	139

Source: UNDP (2020b).
Notes: The no COVID-19 scenario shows the progress of these countries before the pandemic; the COVID-19 baseline scenario is based on known data on the impact of COVID-19 up to 2020; and the high damage scenario is a pessimistic scenario. Missing data indicated by a dash.

Excluding projections, no data currently exist on the effect of the COVID-19 pandemic on the MMR in the Arab region. Accessibility, availability and continuity of care are factors required for good maternal health outcomes and consequently the disruption of health services is likely to increase maternal mortality in the region (Roberton and others, 2020).

In the Arab region, there are 8 million pregnant women and 107 million women of reproductive age currently affected by the pandemic (UNFPA, 2020b). Studies on outcomes of pregnant women admitted for COVID-19 viral infection have shown that COVID-19 itself is unlikely to have a direct impact on maternal mortality (Knight and others, 2020). The impact of COVID-19 on maternal mortality is mediated through the impact of public health control and mitigation measures, which have disrupted health care seeking and reduced antenatal care visits (Roberton and others, 2020; Khetrapal and Bhatia, 2020). Fear of infection, understaffing and health care workers potentially falling ill may have reduced the number of antenatal visits. Pregnant women are also specifically affected by the lack of mobility due to containment measures, which places them at higher risk of severe maternal morbidities such as venous thrombosis (Abdelbadee and Abbas, 2020). Thus, complications and high-risk pregnancies are less likely to be timely detected; consequently, these pregnancies may not receive the appropriate level of care required at delivery to avoid morbidity or mortality.

Women of reproductive age are particularly vulnerable during the COVID-19 period. Of the 8 million pregnant women in the Arab region, 1.5 million were in prior need of humanitarian assistance (UNFPA, 2020a). Before the pandemic there were also 15.5 million women of reproductive age in need of humanitarian assistance; these women are at a particular risk of poor reproductive health outcomes and being left behind (UNFPA, 2020a). In addition, some preliminary data during the COVID-19 period point to the disruption of reproductive health services as a result of the pandemic. A survey of midwives in Tunisia found that 50 percent of sexual and reproductive health services, including abortion and contraceptive services, were disrupted since the start of the COVID-19 pandemic (UN Women, 2020a).

A modelling study of the impact of COVID-19 on maternal and child mortality in low- and middle-income countrie (LMICs) uses the Lives Saved Tool (LiST) (**Figure 13**) to identify potential indirect impacts that COVID-19 may have on service provision for numerous maternal and reproductive health interventions (Roberton and others, 2020). In the modelling scenarios, coverage of maternal and child health interventions and services were reduced by between 9.8 and 51 percent to create three scenarios of increasing severity (Roberton and others, 2020).

In scenario 3, which had a 25-percent reduction in key maternal health interventions (**Appendix 1, Annex 3**), Egypt had the largest number of projected additional maternal deaths at 1,128 over 12 months, followed by Comoros, Iraq, Algeria, Sudan and Yemen (**Figure 13**).

The main contributors to the increase in maternal mortality were a reduction in basic interventions during childbirth such as uterotonics, antibiotics to prevent sepsis, magnesium sulfate to prevent pre-eclampsia, contraception and a reduction in skilled birth assistance (Roberton and others, 2020). The top 10 contributors are listed in **Table 6**.

Figure 13. Projected maternal mortality increase over 12 months according to the three scenarios

Legend:
- Excess maternal deaths in scenario 1
- Excess maternal deaths in scenario 2
- Excess maternal deaths in scenario 3
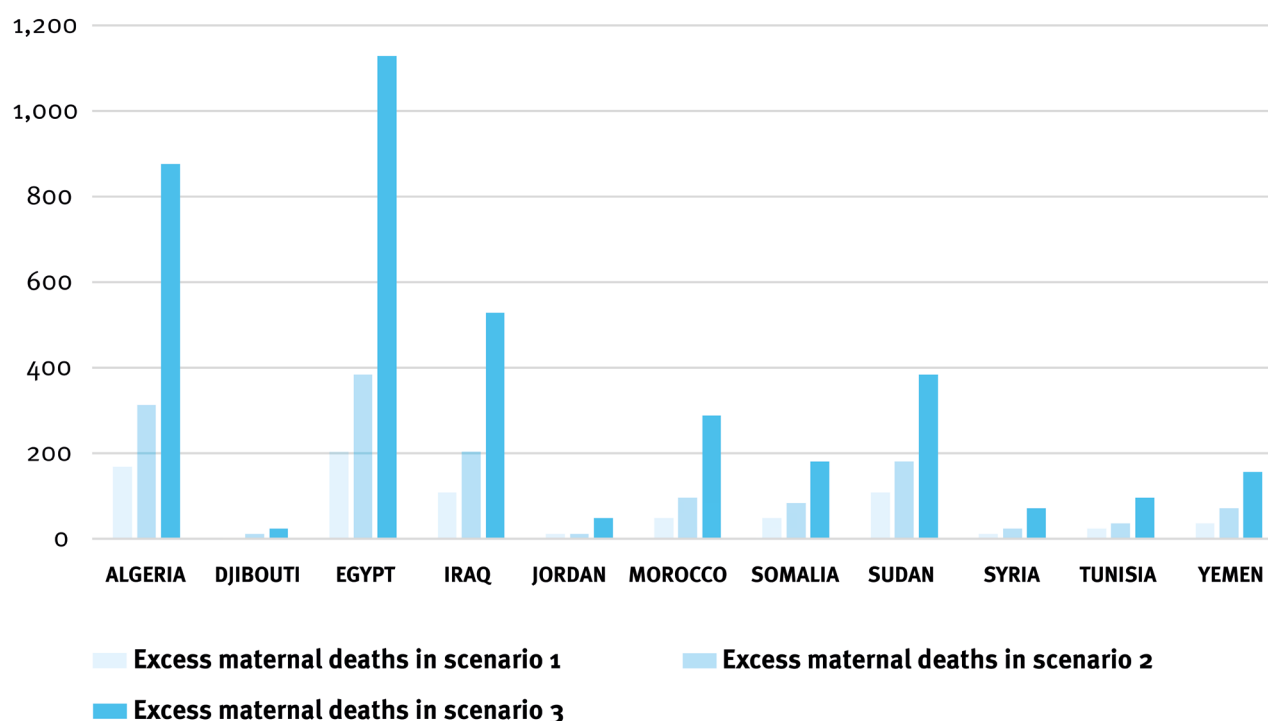
Source: Roberton and others (2020).
*Note*s: The three scenarios are presented in **Appendix 1, Annex 3**. Data on Bahrain, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia and the UAE were not available.

Table 6. Percentage increase in maternal deaths per month among all modelled countries, by intervention[18]

Reduced service	Category	Increase in maternal deaths as a result of reduction in service		
		Scenario 1	Scenario 2	Scenario 3
Parenteral administration of uterotonics	Childbirth	28%	28%	29%
Parenteral administration of antibiotics	Childbirth	12%	12%	13%
Parenteral administration of anticonvulsants	Childbirth	10%	10%	10%
Clean birth environment	Childbirth	9%	9%	10%
Contraceptive use	Family planning	6%	7%	5%
Magnesium sulfate management of pre-eclampsia	Antenatal	7%	6%	5%
Micronutrient supplementation (iron and multiple micronutrients)	Antenatal	5%	4%	4%
Antibiotics for preterm or prolonged premature rupture of membranes	Childbirth	4%	4%	4%
Manual removal of placenta	Childbirth	3%	3%	3%
Removal of retained products of conception	Childbirth	2%	2%	2%

Target 3.2. By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

Indicator 3.2.1. Under-five mortality rate

Indicator 3.2.2. Neonatal mortality rate

Under-five mortality rate

Disparities in the under-five mortality rate existed prior to the pandemic across the countries in the Arab region, with most countries (Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia and the UAE) having reached the SDG target of 25 deaths per 1,000 live births by 2018 (UNDP, 2020c). Rates in the remaining countries and the LDCs were higher with an average of 77 deaths per 1,000 live births in 2017 (ESCWA, 2020b).

The direct impact of COVID-19 on the under-five mortality is likely to be minimal; a recent study showed that COVID-19 infection was uncommon in newborns, with an incidence of 5.6 per 10,000 live births, and was often mild or asymptomatic (Gale and others, 2020). Nevertheless, the indirect effects of COVID-19 are likely to increase under-five mortality in countries where disruptions to nutrition, the continuity of care, and vaccination programmes occur. The multidimensional impact of COVID-19 on SDG indicators is evident in the targets under SDG 3, which in many cases are linked to the targets under SDG 2 regarding food security and nutrition, as well as to targets under SDG 1 regarding income poverty.

Disruption to the continuity of care is likely to affect the management of chronic illnesses such as childhood cancer. For example, a study on barriers to childhood cancer treatment in 19 countries in the Middle East, North Africa and West Asia (including the Arab countries Algeria, Bahrain, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, Palestine, Saudi Arabia, Sudan, Syria and Yemen) found that essential treatments and therapies were delayed in 29 to 44 percent of treatment centres, and the acceptance of new patients was limited in 24 percent of centres. In addition, centres reported high rates of medicine shortages and interruptions in treatment interventions (Saab and others, 2020).

The under-five mortality rate for Arab countries according to three projected scenarios for 2018, 2020 and 2030 (a no COVID-19 scenario, a COVID-19 baseline scenario and a high damage scenario) is presented in **Table 7**. Almost all countries project an increase in under-five mortality in 2020 for the COVID-19 baseline and high damage scenarios. However, across all scenarios, the under-five mortality rate is projected to decrease by 2030.

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[18] See **Appendix 1, Annex 3** for a description of the scenarios.

Table 7. The under-five mortality rate in Arab States according to the three COVID-19 impact scenarios during 2018 and 2020, and projected for 2030

Under-five mortality rate		2018	2020	2030
ALGERIA	No COVID scenario	2018	24.52	22.48
	COVID-19 baseline scenario	24.97	25.48	22.71
	High damage scenario	24.97	25.68	23.44
BAHRAIN	No COVID scenario	24.97	6.955	5.531
	COVID-19 baseline scenario	7.251	7.239	5.644
	High damage scenario	7.251	7.304	5.788
DJIBOUTI	No COVID scenario	7.251	48.76	29.55
	COVID-19 baseline scenario	48.11	52.29	30.36
	High damage scenario	48.11	52.81	33.41
EGYPT	No COVID scenario	48.11	20.77	16.79
	COVID-19 baseline scenario	21.85	21.01	17.14
	High damage scenario	21.85	21.17	17.52
IRAQ	No COVID scenario	21.85	24.16	19.9
	COVID-19 baseline scenario	25.32	26.18	20.57
	High damage scenario	25.32	26.4	21.98
JORDAN	No COVID scenario	25.32	14.88	13.22
	COVID-19 baseline scenario	15.12	15.46	13.46
	High damage scenario	15.12	15.58	13.72
KUWAIT	No COVID scenario	15.12	8.554	6.695
	COVID-19 baseline scenario	8.885	9.12	6.931
	High damage scenario	8.885	9.224	7.181
LEBANON	No COVID scenario	8.885	9.526	8.18
	COVID-19 baseline scenario	9.114	11.15	8.513
	High damage scenario	9.114	11.29	9.696
LIBYA	No COVID scenario	11.75	11.5	9.87
	COVID-19 baseline scenario	11.75	11.34	7.11
	High damage scenario	11.75	11.33	6.708
MOROCCO	No COVID scenario	20.4	19.38	15.75
	COVID-19 baseline scenario	20.4	20.34	16.15
	High damage scenario	20.4	20.46	16.57
OMAN	No COVID scenario	11.9	12.14	11.25
	COVID-19 baseline scenario	11.9	13.44	11.47
	High damage scenario	11.9	13.62	12.49
PALESTINE	No COVID scenario	14.04	13.47	10.43
	COVID-19 baseline scenario	14.04	14.24	10.31
	High damage scenario	14.04	14.36	10.8
QATAR	No COVID scenario	7.736	7.544	5.802
	COVID-19 baseline scenario	7.736	7.889	5.828
	High damage scenario	7.736	7.967	6.092
SAUDI ARABIA	No COVID scenario	9.208	9.215	8.908
	COVID-19 baseline scenario	9.208	9.7	8.973
	High damage scenario	9.208	9.804	9.233

Under-five mortality rate		2018	2020	2030
SOMALIA	No COVID scenario	102.1	102.3	76.47
	COVID-19 baseline scenario	102.1	105.2	80.24
	High damage scenario	102.1	106	83.34
SUDAN	No COVID scenario	49.95	49.14	40.71
	COVID-19 baseline scenario	49.95	51.12	40.24
	High damage scenario	49.95	51.58	42.7
SYRIA	No COVID scenario	23.6	23.18	21.57
	COVID-19 baseline scenario	23.6	23.17	21.53
	High damage scenario	23.6	23.2	21.73
TUNISIA	No COVID scenario	11.51	11.23	9.819
	COVID-19 baseline scenario	11.51	11.79	10
	High damage scenario	11.51	11.49	10.31
UNITED ARAB EMIRATES	No COVID scenario	7.493	7.147	6.078
	COVID-19 baseline scenario	7.493	7.528	6.276
	High damage scenario	7.493	7.597	6.465
YEMEN	No COVID scenario	48	46.66	33.42
	COVID-19 baseline scenario	48	48.72	41.1
	High damage scenario	48	49.18	43.66

Source: UNDP (2020b).
Note: The no COVID-19 scenario shows the progress of these countries before the pandemic; the COVID-19 baseline scenario is based on known data on the impact of COVID-19 up to 2020; and the high damage scenario is a pessimistic scenario.

A modelling study estimated the additional number of under-five deaths using three COVID-19 impact scenarios in 10 Arab countries (Algeria, Djibouti, Egypt, Iraq, Jordan, Morocco, Sudan, Syria, Tunisia and Yemen) (**Table 8**) (Roberton and others, 2020). These 10 countries include 41 million children aged 0–4 years, which is 75 percent of the under-five population in the Arab region. This study estimated an increase in under-five deaths of 8 percent (or 11,000 excess child deaths) in the least severe scenario to 39 percent (or 50,000 excess child deaths) in the most severe scenario, compared with the baseline of around 135,000 under-five deaths (**Figure 14**; UNICEF and WHO, 2020). The number of estimated excess deaths varies widely across countries in the region (**Table 9**).

Table 8. Excess under-five deaths in 10 Arab States according to three scenarios

Additional under-five deaths in 10 MENA/Arab countries	Additional deaths due to reduced health coverage	Additional deaths due to increased wasting	Total additional deaths	% Increase in under-five deaths as a result of COVID-19 compared to baseline
Scenario 1 (Least severe)	9 072	2 034	11 106	8%
Scenario 2	15 426	4 228	19 654	15%
Scenario 3 (Most severe)	39 762	11 697	51 459	39%

Source: Roberton and others (2020).

Figure 14. Projected child mortality increase across six months according to the three scenarios
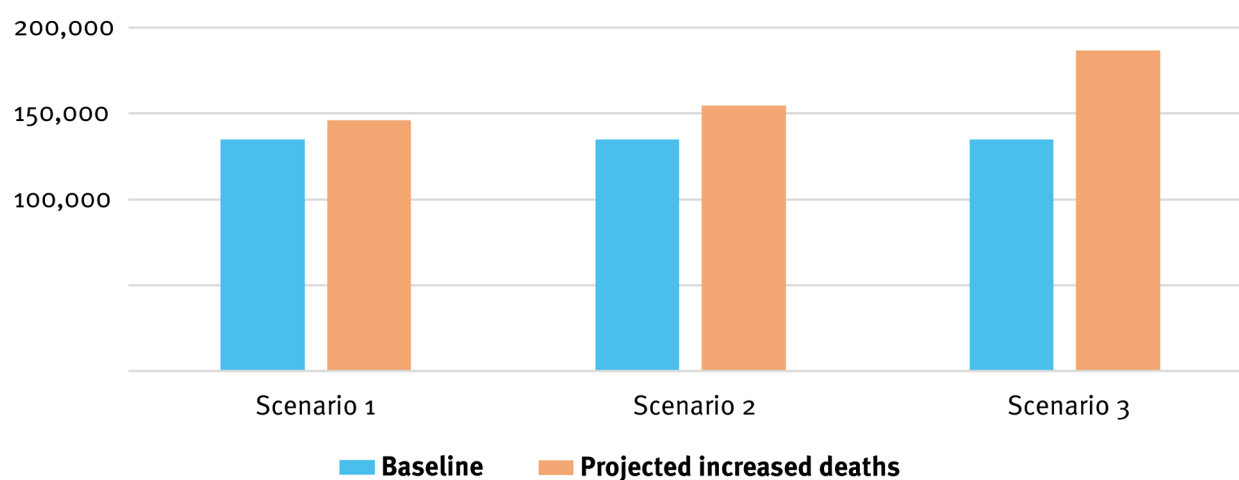
Source: Roberton and others (2020).

Table 9. Projected child mortality increases over 12 months according to the three scenarios

	Scenario 1	Scenario 2	Scenario 3
	Excess deaths	Excess deaths	Excess deaths
ALGERIA	3,120	5,640	15,720
DJIBOUTI	120	240	720
EGYPT	4,920	9,000	24,840
IRAQ	2,640	4,440	11,400
JORDAN	360	600	1,560
MOROCCO	1,320	2,400	6,960
SOMALIA	5,460	8,400	20,640
SUDAN	5,640	9,840	23,520
SYRIA	720	1,200	3,360
TUNISIA	360	600	1,680
YEMEN	3,000	5,280	13,200
Source: Roberton and others (2020).			

The main contributors to the increase in under-five mortality in the countries modelled were an increase in wasting and case management of pneumonia and sepsis. The top 10 contributors are listed below in **Table 10**. Using these results, the main contributors to the aggregate regional increase in childhood mortality in the second COVID-19 scenario were identified to be disruptions in the health care interventions listed in **Table 11**, as well as contributions from wasting. Health coverage was responsible for a larger proportion of deaths than the fraction due to wasting.

Table 10. Percentage increase of under-five deaths per month among all modelled countries, by intervention[19]

Reduced service	Category	Increase in child deaths as a result of reduced services		
		Scenario 1	Scenario 2	Scenario 3
Increase in wasting prevalence	Wasting	18%	21%	23%
Case management of neonatal sepsis or pneumonia	Curative	18%	17%	18%
Oral antibiotics for pneumonia	Curative	16%	16%	15%
Oral rehydration solution	Curative	8%	8%	8%
Thermal protection	Childbirth	5%	5%	5%
Clean cord care	Childbirth	5%	4%	3%
Tetanus toxoid vaccination	Antenatal	4%	4%	5%
Neonatal resuscitation	Childbirth	3%	3%	3%
Immediate drying and additional stimulation	Childbirth	3%	3%	3%
Clean birth environment	Childbirth	2%	2%	2%

Source: Roberton and others (2020).

Table 11. The proportion of under-five deaths attributable to each item in the second COVID-19 scenario

Disruption in second COVID-19 scenario	Percentage of additional deaths attributed to disruption
Case management of neonatal sepsis/pneumonia	22%
Increase in wasting prevalence	22%
Oral antibiotics for pneumonia	11%
Thermal protection	6%
Clean cord care	5%
Tetanus toxoid vaccination	4%
Diphtheria, tetanus and pertussis (DPT) vaccine	4%

Source: UNICEF and WHO (2020).

[19] See **Appendix 1, Annex 3** for a description of the scenarios.

The disruption of vaccination services as a result of the COVID-19 pandemic also affects under-five mortality. With many vaccination campaigns, including those for measles and poliovirus, temporarily halted during the pandemic (Li and others, 2021), this disruption is likely to have a mass impact on under-five deaths (Khetrapal and Bhatia, 2020).

A modelling study using previously reported country-specific child mortality impact estimates of childhood immunization for diphtheria, tetanus, pertussis, hepatitis B, *Haemophilus influenzae* type b, *Streptococcus pneumoniae*, rotavirus, measles, meningococcal meningitis group A, rubella, and yellow fever in African countries estimated the number of under-five deaths averted by vaccination campaigns during the COVID-19 period (Abbas and others, 2020). The modelling estimated the benefits of continuing routine child vaccination services during the pandemic period. The modelling found that the number of under-five deaths averted by continuing vaccination campaigns far outweighed the number of deaths that could result from COVID-19 infection at vaccination clinics. In Arab countries, up to 22,338 deaths, such as in the case of Sudan (**Table 12**), could possibly be avoided through routine vaccination.

Table 12. Benefits and risks of sustaining routine childhood immunization at the national level in Arab countries in Africa

COUNTRY	Deaths averted by vaccination (95% UI)*	Excess COVID-19 deaths (95% UI)*	Benefit-risk ratio** (95% UI)*
ALGERIA	18 164 (11750-28146)	268 (29-794)	69 (10-234)
DJIBOUTI	273 (173-435)	5 (1-14)	58 (8-203)
EGYPT	24 593 (11655-48336)	41 (54-1221)	60 (6-216)
LIBYA	2 323 (1517-3463)	34 (5-103)	70 (11-230)
MOROCCO	7 273 (3698-13837)	221 (26-657)	34 (4-124)
SOMALIA	9 697 (6695-14 275)	102 (11-300)	96 (16-319)
SUDAN	22 338 (13 975-34 110)	334 (49-1003)	68 (10-231)
TUNISIA	1 854 (723-3626)	54 (8-163)	35 (3-128)

Source: Abbas and others (2020).
*Note*s: a) median estimates and 95-percent uncertainty intervals; b) estimates of child deaths averted by sustaining routine vaccination by visiting routine vaccination service delivery points. Data on Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the UAE and Yemen were not available.

Neonatal mortality rate

More than 45 percent of the under-five mortality in the Arab region is neonatal mortality (ESCWA, 2020b). Much like the under-five mortality rate, there are major inequalities in the neonatal mortality rate between Arab States, with the rate as low as three deaths per 1,000 live births in Bahrain and as high as 37.5 per 1,000 live births in Somalia as at 2018 (UNDP, 2020c). The LDCs in the region currently have some of the highest rates in the world, with an average rate of 31 deaths per 1,000 live births—more than twice the SDG target (ESCWA, 2020b).

The neonatal mortality rate for Arab countries according to three projected scenarios for 2018, 2020 and 2030 is presented in **Table 13**. Most countries project an increase in neonatal mortality in 2020 in both the COVID-19 baseline and high damage scenarios. Nonetheless, the neonatal mortality rate is projected to decline in all countries and across all scenarios by 2030.

Table 13. The neonatal mortality rate for Arab States according to the three COVID-19 impact scenarios in 2018, 2020 and 2030

Neonatal mortality (per 1,000 live births)		2018	2020	2030
ALGERIA	No COVID scenario	14.8	14.45	12.88
	COVID-19 baseline scenario	14.8	14.94	13
	High damage scenario	14.8	15.04	13.36
BAHRAIN	No COVID scenario	1.168	1.116	0.87
	COVID-19 baseline scenario	1.168	1.162	0.888
	High damage scenario	1.168	1.173	0.911
DJIBOUTI	No COVID scenario	31.17	31.02	18.67
	COVID-19 baseline scenario	31.17	32.56	19.23
	High damage scenario	31.17	32.79	21.36
EGYPT	No COVID scenario	11.82	11.24	8.975
	COVID-19 baseline scenario	11.82	11.35	9.132
	High damage scenario	11.82	11.42	9.306
IRAQ	No COVID scenario	17.24	16.41	13.09
	COVID-19 baseline scenario	17.24	17.44	13.42
	High damage scenario	17.24	17.55	14.12
JORDAN	No COVID scenario	10.28	10.05	8.654
	COVID-19 baseline scenario	10.28	10.34	8.776
	High damage scenario	10.28	10.41	8.904
KUWAIT	No COVID scenario	3.168	3.02	2.217
	COVID-19 baseline scenario	3.168	3.277	2.321
	High damage scenario	3.168	3.326	2.431
LEBANON	No COVID scenario	4.998	5.185	4.403
	COVID-19 baseline scenario	4.998	6.01	4.572
	High damage scenario	4.998	6.082	5.17
LIBYA	No COVID scenario	6.096	5.916	4.885
	COVID-19 baseline scenario	6.096	5.859	3.566
	High damage scenario	6.096	5.856	3.347
MOROCCO	No COVID scenario	15.97	15.11	12.09
	COVID-19 baseline scenario	15.97	15.81	12.41
	High damage scenario	15.97	15.87	12.75
OMAN	No COVID scenario	5.467	5.559	5.087
	COVID-19 baseline scenario	5.467	6.159	5.184
	High damage scenario	5.467	6.245	5.642
PALESTINE	No COVID scenario	6.347	6.061	4.551
	COVID-19 baseline scenario	6.347	6.454	4.502

Neonatal mortality (per 1,000 live births)		2018	2020	2030
	High damage scenario	6.347	6.514	4.738
QATAR	No COVID scenario	3.674	3.566	2.721
	COVID-19 baseline scenario	3.674	3.714	2.732
	High damage scenario	3.674	3.747	2.844
SAUDI ARABIA	No COVID scenario	6.666	6.57	5.959
	COVID-19 baseline scenario	6.666	6.784	5.987
	High damage scenario	6.666	6.83	6.102
SOMALIA	No COVID scenario	37.46	37.48	27.38
	COVID-19 baseline scenario	37.46	38.64	28.82
	High damage scenario	37.46	38.94	30
SUDAN	No COVID scenario	27.92	27.3	22.11
	COVID-19 baseline scenario	27.92	28.25	21.88
	High damage scenario	27.92	28.47	23.04
SYRIA	No COVID scenario	6.632	6.438	5.573
	COVID-19 baseline scenario	6.632	6.434	5.56
	High damage scenario	6.632	6.453	5.628
TUNISIA	No COVID scenario	7.767	7.533	6.385
	COVID-19 baseline scenario	7.767	7.801	6.471
	High damage scenario	7.767	7.844	6.62
UNITED ARAB EMIRATES	No COVID scenario	3.281	3.12	2.614
	COVID-19 baseline scenario	3.281	3.282	2.697
	High damage scenario	3.281	3.311	2.776
YEMEN	No COVID scenario	22.99	22.25	15.31
	COVID-19 baseline scenario	22.99	23.31	19.23
	High damage scenario	22.99	23.55	20.54

Source: UNDP (2020b).
Note: The no COVID-19 scenario shows the progress of these countries before the pandemic; the COVID-19 baseline scenario is based on known data on the impact of COVID-19 up to 2020; and the high damage scenario is a pessimistic scenario.

The pandemic has increased the neonatal mortality rate in LMICs and is projected to increase in the Arab region, reversing the progress already made towards achieving the SDG 3 targets. The LiST model, which includes neonatal deaths within under-five mortality projections, showed that neonatal cases are responsible for one third of excess deaths projected under scenario two (**Table 11**; Roberton and others, 2020).

The increase in neonatal mortality is due to several factors including fewer antenatal care visits made before the birth and a reduction in thermal support, clean cord care, antibiotics for sepsis and resuscitation interventions at birth (Roberton and others, 2020; Ashish and others, 2020). In the least severe scenario, clean birth environment is reduced from a baseline of 79.2 to 67.9 percent coverage in Algeria, and from 80.4 to 68.9 percent coverage in Jordan. Least developed Arab States such as Sudan and Yemen are projected to have less severe reductions of around 1 percent, due to the pre-existing lack of services (Roberton and others, 2020). Antibiotics for sepsis in the least severe scenario is also expected to dramatically reduce, from a baseline of 76.1 to 62.0 percent, 86.7 to 70.6 percent, and 72.7 to 59.1 percent in Comoros, Egypt, and Morocco, respectively (Roberton and others, 2020).

Section 2: The pandemic will affect the management of non-communicable diseases, and persons living with non-communicable diseases are at higher risk of COVID-19 complications

Target 3.4. By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

Indicator 3.4.1. Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

NCDs are the main cause of premature death in the Arab region (Mokdad and others, 2014) due to the high prevalence of risk factors, such as high blood sugar levels, high blood pressure, obesity and smoking (ESCWA, 2020b). Twenty-two percent of deaths in the region are attributed to NCDs, exceeding the world average of 19 percent (ESCWA, 2020b).

Persons infected with COVID-19 who had been living with pre-existing chronic conditions including diabetes, cardiovascular disease, respiratory disease and cancer, have been found to be at higher risk of mortality from the infection (Williamson and others, 2020; Clift and others, 2020). NCD risk factors, including obesity, alcohol consumption, physical inactivity and pollution were also likely to increase mortality from COVID-19 (Williamson and others, 2020; Clift and others, 2020).

NCDs tend to be chronic illnesses that require numerous and continuous interactions with health services. Continuous management and rehabilitation of NCDs are required to prevent deterioration, premature disability and mortality. COVID-19 has caused major disruptions to NCD-related health services, including continuity of NCD care, and this has direct implications for people with NCDs (WHO, 2020c). For example, there has been a decrease in cancer diagnosis due to closure of or limited services for cancer screening and referral mechanisms (Jones and others, 2020). In addition, disruption in admission services for acute events, such as myocardial infarction and stroke, will result in increased out-of-hospital deaths and delays in rehabilitation (Mafham and others, 2020). Service disruption combined with increased exposure to NCD behavioural risk factors, including reduced physical exercise due to movement restrictions, stress and unhealthy diets, has increased the likelihood of poorly controlled and managed conditions (WHO, 2020c).

WHO Regional Office for the Eastern Mediterranean (WHO EMRO) countries include over 150 million individuals living with NCDs, including 100 million living with hypertension, 50 million living with diabetes and 1.35 million living with cancer (WHO EMRO, 2020). A WHO EMRO rapid assessment of service delivery for NCDs during the COVID-19 pandemic highlighted disruption to NCD services in WHO EMRO countries according to surveys conducted with 19 ministries of health in the EMR region (**Table 14**). In summary, approximately 40 percent of NCD services were either partially or completely disrupted during 2020. These include 53 percent of hypertension management services, 42 percent of cancer treatment services, 42 percent of diabetes management services and 25 percent of acute cardiovascular disease management services (**Figure 15**). The main causes for the disruption to NCD services are outlined in **Figure 16**. The impact on premature disability, morbidity and mortality is yet unknown; however, any disruption to acute cardiovascular disease management (stroke or myocardial infarction) is likely to increase morbidity or mortality.

Table 14. Impact of COVID-19 on non-communicable disease services in EMR countries

Service	Level of disruption according to survey with Ministry of Health staff
NCD staff reassigned to COVID-19 response	**16%** – <u>all</u> staff supporting COVID-19 response plus routine NCD activities
	32% – <u>all</u> staff supporting COVID-19 response full-time
	37% – <u>some</u> staff supporting COVID-19 response plus routine NCD activities
	11% – <u>some</u> staff supporting COVID-19 response full-time
	5% reported no disruption
NCD funds reallocated to other services	**5%** had <u>1–25%</u> of funds reallocated
Continuity of NCD services	**63%** had continuity of NCD services included in the essential services list in COVID-19 plan
NCD services included in COVID-19 plan	**68%** – CVD services
	68% – Cancer services
	68% – Diabetes services
	58% – Chronic respiratory disease services
	58% – Chronic kidney disease and dialysis services
	42% – Dental services
	32% – Rehabilitation services
	42% – Tobacco cessation services
	11% – Other services
Access to essential NCD services	**16%** – Outpatient NCD services <u>closed</u>
	32% – Outpatient NCD services <u>open</u>
	53% – Outpatient NCD services open with limited access/staff/ alternate locations/different modes
	47% – Inpatient NCD management <u>open</u>
	53% – Inpatient NCD management <u>open for emergencies only</u>
Source: WHO EMRO (2020)	

Figure 15. NCD-related services disrupted due to COVID-19 in EMR countries

Palliative care services: 37% Partially disrupted, 16% Completely disrupted
Hypertension management: 42% Partially disrupted, 11% Completely disrupted
Urgent dental care: 32% Partially disrupted, 16% Completely disrupted
Rehabilitation services: 26% Partially disrupted, 21% Completely disrupted
Asthma services: 47% Partially disrupted
Cancer treatment: 42% Partially disrupted
Diabetes and diabetic complications management: 42% Partially disrupted
Cardiovascular emergencies: 26% Partially disrupted

■ Completely disrupted ■ Partially disrupted

Source: WHO EMRO (2020).

Figure 16. Main causes of NCD service disruption in EMR countries

Closure of outpatient disease-specific consultation clinics: 47%
Decrease in inpatient volume due to cancellation of elective care: 47%
Government or public transport lockdowns hindering access to health services: 32%
NCD-related clinical staff deployed to provide COVID-19 relief: 32%
Decrease in outpatient volume due to patients not presenting: 32%
Insufficient staff to provide services: 26%
Closure of outpatient NCD services as per government directive: 21%
Insufficient personal protective equipment available for health-care workers: 21%
Others: 16%
Closure of population-level screening programmes: 16%
Unavailability/stock-out of essential medications or resources: 11%

Source: WHO EMRO (2020).

Disruption to the delivery of numerous specialty health care services has been widely reported in the region. A reduction in rheumatology visits has negatively impacted the continuity of care for patients living with chronic rheumatic diseases (Ziadé and others, 2020). Difficulties were attributed to the inability to carry out consistent visits and to the inconsistent availability of chronic medications (Ziadé and others, 2020). The negative impact of the lockdown measures on mental health were also found to be a factor that contributed to continuity of care (Ziadé and others, 2020). Furthermore, there is a lack of continuity of care for cancer management in Jordan (Bakkar and others, 2020). In addition, national lockdowns have impacted treatment adherence and increased unhealthy behaviours among diabetic patients in Saudi Arabia (Alshareef and others, 2020). Further studies are required to assess the impact of lockdowns on physical activity and unhealthy diets in the Arab region.

Data on mental health in the Arab region during the peri-COVID-19 period also show the considerable impact of the pandemic on health (**Box 2**).

Box 2

MENTAL HEALTH IS FUNDAMENTAL TO HUMAN CAPABILITIES AND DEVELOPMENT IN THE ARAB REGION

WHO's definition of mental health is "a state of well-being in which an individual can realize his or her own potential, cope with the normal stresses of life, work productively and make a contribution to the community." This goes beyond the absence of an underlying mental health disorder or diagnosis. Poor mental health can directly impact people's ability to enjoy greater freedoms and capabilities, thus playing a role in limiting human development (Lengfelder, 2017). On the other hand, limiting functionings and the freedom to make choices as a result of COVID-19-related lockdowns and restrictions may also undermine mental health and well-being (White, Imperiale and Perera, 2016).

Developmental progress towards improved mental health is tracked as part of target 3.4 of SDG 3. Indicator 3.4.2, which measures suicide mortality rate, is currently the only indicator measuring the effects of mental health on human development. As at 2016, the age-standardized suicide rates in some Arab countries were estimated to be less than half the global rate (4.3/100,000 compared with 10.5/100,000) (ESCWA, 2020b). However, this indicator does not sufficiently address the effect of non-fatal mental health disorders on morbidity in Arab States. Rates of depression and anxiety in Arab States are among the highest in the world, partly attributed to protracted emergencies, conflict and forced displacement in the region which threaten security and livelihoods, with higher rates of depression and anxiety observed in women (Lengfelder, 2017).

The COVID-19 pandemic has also undermined mental health in the region; a survey conducted by WHO (2020a) has found that pandemic and pandemic-related containment measures have not only triggered and exacerbated mental health conditions, but also disrupted mental health services in most countries around the world. The increased mental health burden can be partially attributed to the sudden curtailing of freedoms and functionings that have resulted from the pandemic and the pandemic-related containment measures. In the Arab region, emerging data from the COVID-19 pandemic show high levels of stress, anxiety and depression among different segments of the population (**Table 15**).

Table 15. Impact of COVID-19 on mental health in some Arab countries

ALGERIA	▪ In a survey of 678 members of the public conducted at the beginning of the lockdown, **half of the respondents reported experiencing anxiety,** and around **half reported experiencing stress** (Madani, Boutebal and Bryant, 2020).
EGYPT	▪ A survey of the Egyptian general public found an increased level of psychological distress, attributed to **increased financial strain**, **increased home stress**, and **feelings of fear and helplessness** (El-Zoghby, Soltan and Salama, 2020). ▪ A survey of 1,629 members of the public and health workers found a **high prevalence of depression (67.1 percent), anxiety (53.5 percent) and stress (48.8 percent)**. A higher prevalence of severe depression, anxiety and stress was found among **women** (Arafa and others, 2020).
JORDAN	▪ A cross-sectional study on the mental health of the general public, health care workers, and university students found the prevalence of **depression** to be **23.8 percent** and **anxiety** to be **13.1 percent** across all groups, with women health care workers and university students at higher risk of depression and anxiety (Naser and others, 2020).
KUWAIT	▪ Geographic disparities in stress levels showed that residents of urban areas, which were spatially associated with higher education levels, tended to experience higher stress levels, whereas geographic areas associated with lower education levels experienced less stress (Alnasrallah and Alshehab, 2020).
LEBANON	▪ A survey of 950 members of the public found **post-traumatic stress symptoms** emerging during the first four weeks of quarantine (Fawaz and Samaha, 2020).
OMAN	▪ A study found that **one in four health care workers** are experiencing moderate to severe **anxiety**, with **women** reporting higher rates of anxiety and depression than their male counterparts (Badahdah and others, 2020).
SAUDI ARABIA	▪ In a survey of 1,160 members of the public, **23.6 percent** reported experiencing **moderate or severe psychological impacts** arising from the pandemic. Furthermore, **28.3 percent** reported experiencing **moderate to severe depression, 24 percent** reported experiencing **moderate to severe anxiety,** and **22.3 percent** reported experiencing **moderate to severe stress** (Alkhamees and others, 2020). ▪ **More than half** of 502 health care workers employed by the Ministry of Health reported **depressive disorders** of varying severity. **Half** reported generalized anxiety disorder as a result of the pandemic (AlAteeq and others, 2020).

Across the Arab region there is evidence of growing disease burden of depression, stress, and anxiety. This has direct implications on increased disability and number of health life years lost due to mental health disorders (SDG 3 – target 3.4).

It is clear that current mental health indicators within the SDG framework are not sufficient to monitor progress towards health and well-being for all. As part of the recovery from the COVID-19 shock, mental health in Arab States should receive special attention beyond current indicators to fulfil the goal of sustainable development.

Vulnerability and exclusion: At risk of being left behind

With increasing privatization of healthcare in the region, the **poor and uninsured** were particularly vulnerable during the COVID-19 shock. Financial barriers to accessing healthcare in the Arab region are well documented [100, 101]. Fragile settings such as Sudan and Yemen have some of the highest out of pocket expenditure in the region (out-of-pocket expenditure as a share of total expenditure on health was 76% in Sudan and Yemen, respectively), which will result in healthcare being inaccessible to the lowest socioeconomic groups [101]. With the increase in unemployment and financial insecurity (explored further in SDG 8), poorer households may be more vulnerable to postponing or foregoing medical treatment.

Households facing poverty and food insecurity (SDG 2) were also vulnerable to health complications arising from poor nutrition. **Youth, the unemployed, the informal labour force, persons with disabilities, migrant workers** and **women** make up a great proportion of the Arab population with no access to social security schemes, health insurance or benefits [16]. Women's access to healthcare was further undermined during the pandemic with interruptions to maternal, perinatal, and neonatal care. In addition, women in the Arab world have faced increased exposure to violence, including domestic violence, femicide, and female genital mutilation. Child marriage also increased as a result of increasing poverty and insecurity [102]. Access to services was also undermined in general, with many services deemed "unessential" and thus suspended, such as mental health and sexual and reproductive health services. These compounding factors have rendered women even more vulnerable to developing and exacerbating harm [102]. The impact of the COVID-19 pandemic on the health of women and girls is explored further in the research paper *COVID-19 and Gender in the Arab States: Using a human development lens to explore the gendered risks, outcomes and impacts of the pandemic on women's health*.

Refugees, IDPs and conflict-affected populations were also facing heightened vulnerability prior to the pandemic (ESCWA, 2020b). These groups face shortages of resources and health care workers, and refugees and internally displaced groups in particular often face crowded conditions in camps with limited infectious disease control measures. Disruptions to the continuity of care for chronic diseases in conflict areas will be further exacerbated by the pandemic, further undermining progress towards the SDG targets.

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

SDG 4, which consists of ensuring "inclusive and equitable quality education" and promoting "lifelong learning opportunities for all," highlights the role that quality education plays in improving socio-economic well-being and contributing to sustainable development at the national, regional and global levels. The dimensions and indicators of this goal are closely linked with other SDGs: the goal stresses the importance of encouraging inclusive, equal and lifelong learning (SDG 5: Gender equality; SDG 10: Reduced inequalities). SDG 4 is also related to prospects of employment and income generation (SDG 1: No poverty; SDG 8: Decent work and economic growth) with its focus on a long-term vision for education that equips individuals for the jobs of the future.

Background: SDG 4 coverage and overall performance in the Arab region

Most SDG 4 indicators reported in the ASDR (2020) show that even before COVID-19, the Arab region was not on track to achieve the targets of this goal by 2030 and was lagging behind the global average in terms of performance and progress. Additionally, the regional aggregates used in the indicators reported in the ASDR (2020) are based on outdated data and the periods and years covered have not been harmonized across the different countries. Moreover, these reported indicators overlook key dimensions that are shaping the trajectory and prospects of human development in Arab countries. In particular, if left unaddressed, the dimensions of exclusion and marginalization will further delay the provision of inclusive and equitable quality education well beyond 2030.

The ASDR (2020) finds that education in the Arab region does not meet its transformative potential despite the higher enrolment levels and recent increase in investment. It identifies challenges for achieving SDG 4 that can be put into two categories (ESCWA, 2020b):

1) Inclusiveness and equity in access to education: Vulnerable and marginalized groups are particularly affected and at risk of being left behind. These include refugee and internally displaced children and students living in poor and marginalized areas, girls—who account for just over half of all out-of-school 15 to 17 year-olds (UNICEF, 2019b)—, students with disabilities and young people who are not in employment, education or training (NEET). Social fault lines, increased exclusion and inequalities are exacerbated by a two-tier educational system that has become increasingly reliant on private educational systems in the region, with a significant divide between public and private education.

2) The quality of education systems and the content delivered do not fulfil the education sector's transformative potential to meet the targets under SDG 4. Primary education does not prepare Arab students for higher education, which in turn does not equip students with the skills required for a dynamic and innovative labour market (ESCWA, 2020b).

COVID-19 shock

Education systems globally have been disrupted by the pandemic, as schools had to close to contain the spread of the virus, and their reopening has been reversed to control subsequent waves of infection. School closures have affected more than 1.5 billion learners and their families, and a survey conducted by United Nations Educational, Scientific and Cultural Organization (UNESCO) between July and October 2020 found that an average of 47 days of in-person schooling were lost in 108 countries, the equivalent of al-most a quarter of a school year (UNESCO, UNICEF and World Bank, 2020).

These disruptions will have negative effects on students' learning outcomes as well as their social and behavioural development. The pandemic is also deepening the education crisis and exacerbating educational inequalities, particularly in LICs (United Nations Department of Economic and Social Affairs, 2020). These disruptions are also expected to reduce economic opportunities for this generation of students in the long term. Concerns about dropout rates have increased in poor countries as families face difficult decisions on household spending as well as tougher economic conditions resulting from employment and income losses (Blake and Wadhwa, 2020). The World Bank warns that the current generation of students risks facing an estimated $10 trillion of losses in labour earnings over their working lives (representing around 10 percent of global GDP) as a result of pandemic-related learning losses, lost months of schooling and higher dropout rates (Blake and Wadhwa, 2020; Azevedo and others, 2020a).

Figure 17 shows the overlapping impacts of closure of schools and economic crises on SDGs 1, 2, 8 and 10. The impact of school closures reaches beyond educational goals; it pauses school feeding programmes, exacerbates economic inequalities and reduces human capabilities, resilience and progress towards overcoming intergenerational cycles of poverty.

Figure 17. The crosscutting short- and long-term impacts of school closures and the economic crisis on human capabilities
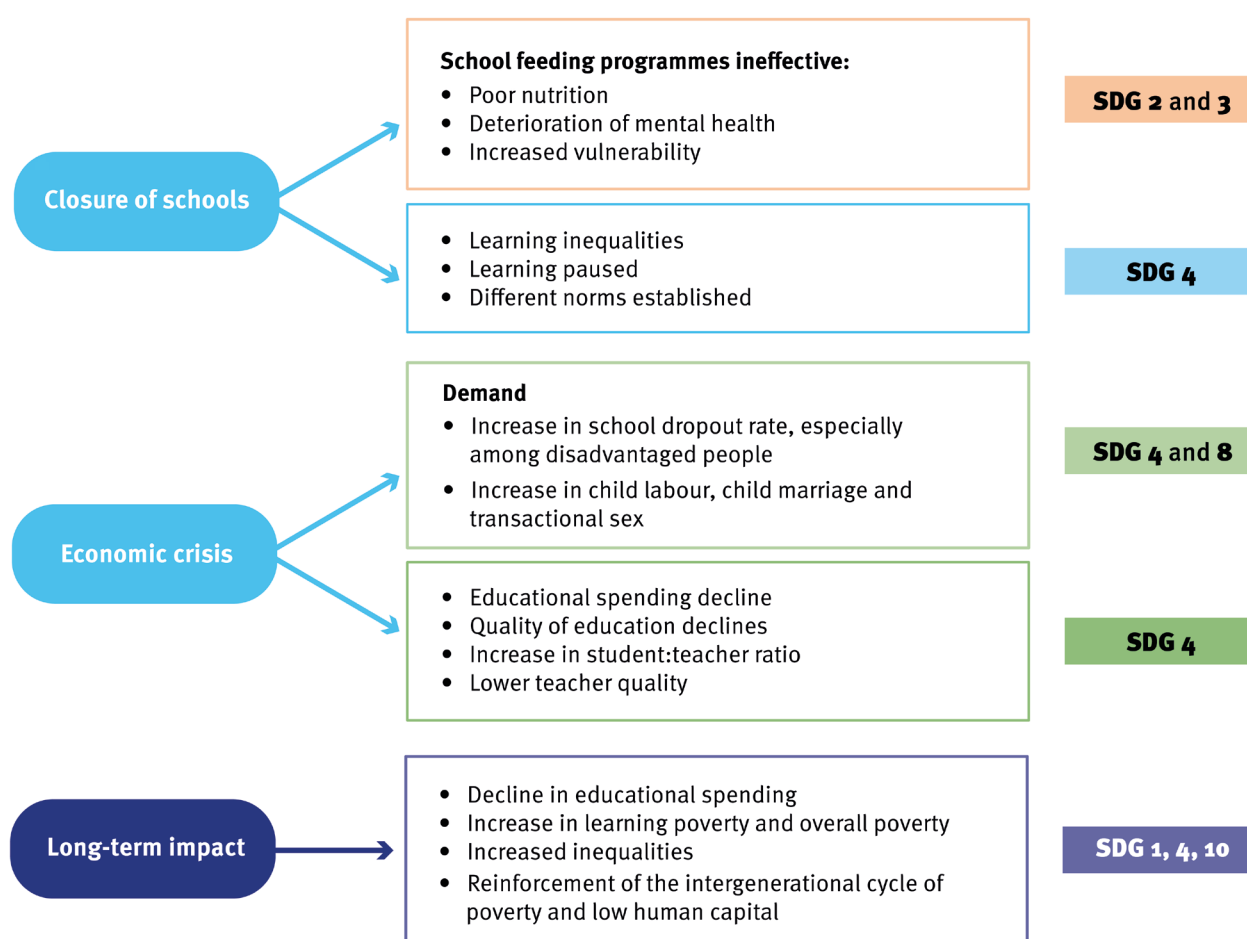
Source: World Bank (2021c).

Scope

The targets and indicators chosen for the study of the impact of COVID-19 on SDG 4 are related to school attainment and are focused on the access to and quality of education, which were also matched with the MPI framework. The assessment has also relied on additional data and indicators extracted from the World Bank Development Indicators and the Arab Development Portal to investigate potential effects on exclusion and inequalities in accessing education across the Arab region.

SDG 4 target	Indicator
Target 4.1. By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	**4.1.1.** Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex
Target 4.2. By 2030, ensure that all boys and girls have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	**4.2.2.** Participation rate in organized learning (one year before the official primary entry age), by sex
Target 4.5. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations	**4.5.1.** Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated

Section 1: The pandemic will further impede efforts in providing access to free and equitable education as distance learning adds a new dimension of exclusion

Pre-pandemic: Out-of-school children and marginalization of vulnerable communities

According to the World Bank Development Indicators (**Figure 18**; **Figure 19**; World Bank, 2021c), gross enrolment ratios[20] in the Arab world[21] in 2019 stood at 96 percent for primary education and 72 percent for secondary education. Enrolment rates for all three educational levels have been increasing over the past few decades and catching up with world averages (Abdellatif, Pagliani and Hsu, 2019). However, the level of these improvements varied across different countries in the region. For example, the gross enrolment ratio in primary education stood at 115 percent in Tunisia in 2018 compared with 81 percent in Jordan and 70 percent in Djibouti. Similarly, the gross enrolment ratio in secondary education reached 110 percent in Saudi Arabia compared with only 51 percent in Djibouti (**Figure 19**; World Bank, 2021c). The regional aggregate included in ASDR 2020 also shows that the Arab region is lagging behind other countries in ensuring that children are participating in organized learning before enrolling in primary education. In fact, only 47.2 percent[22] of children in the region are enrolled in this type of learning compared with 70 percent globally, and well below the 100 percent target set to be achieved by 2030 (**Figure 20**; ESCWA, 2020b).

Target 4.1. *By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes*

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[20] Some gross enrolment ratios may exceed 100 percent. This is because the World Bank definition of "gross" enrolment includes students of all ages and therefore includes students whose age exceeds the official age group (for example, students repeating the year). For this reason, if the data include cases of late enrolment, early enrolment, or repetition, the total enrolment can exceed the population of the age group that officially corresponds to the level of education, leading to ratios greater than 100 percent.
[23] The World Bank's "Arab world" classification includes the 22 countries of the Arab league: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen.
[24] The calculated Arab regional aggregate includes the data values of the following countries and years: Algeria (2010); Syria, the UAE and Yemen (2013); Comoros (2014); Palestine (2015), Bahrain, Egypt, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia (2016), Djibouti (2017). Data for the following countries was missing: Somalia, Iraq, Libya, Sudan, Jordan and Tunisia.

Figure 18. Gross enrolment ratio for primary education in 2019 (%)
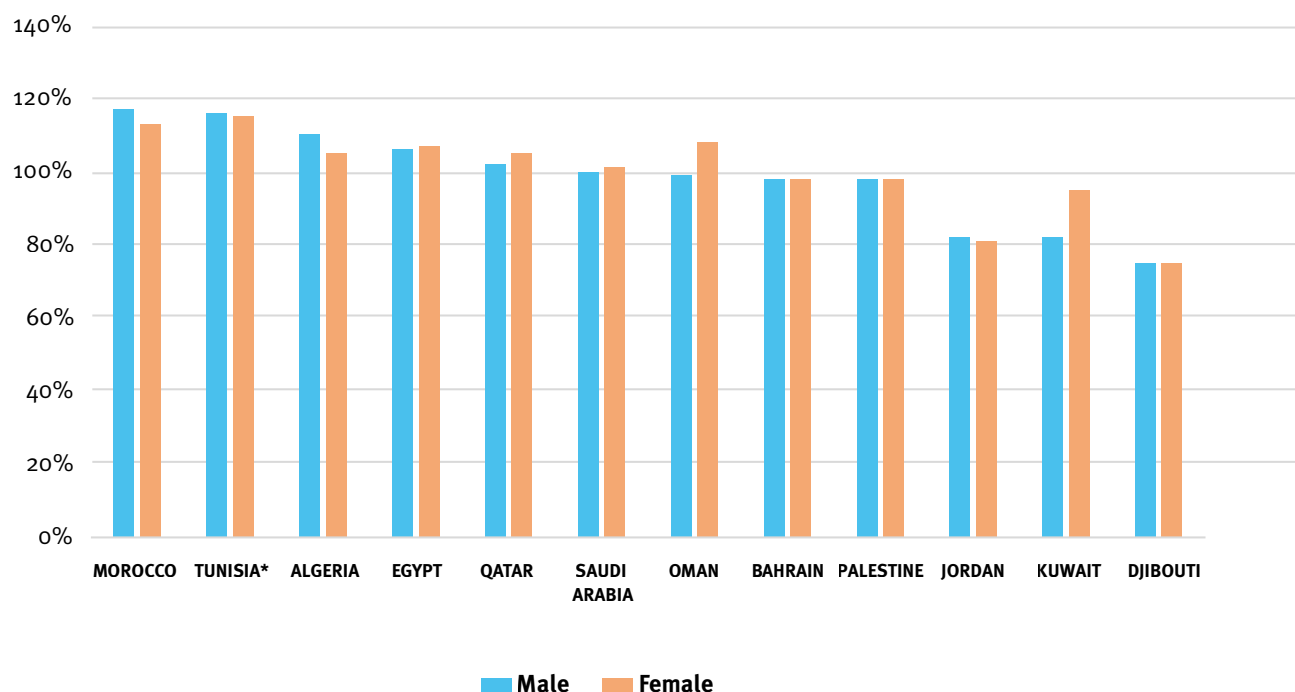
Source: World Bank (2021c).
*Data from 2018.
*Note*s: The authors have only included countries for which data were available for the years 2018 and 2019. The data available for other countries in the Arab region were outdated: Iraq (2007), Lebanon (1985), Libya (2006), Somalia (2007), Sudan (2017), Syria (2013), the UAE (2017).

Figure 19. Gross enrolment ratio for secondary education in 2019 (%)
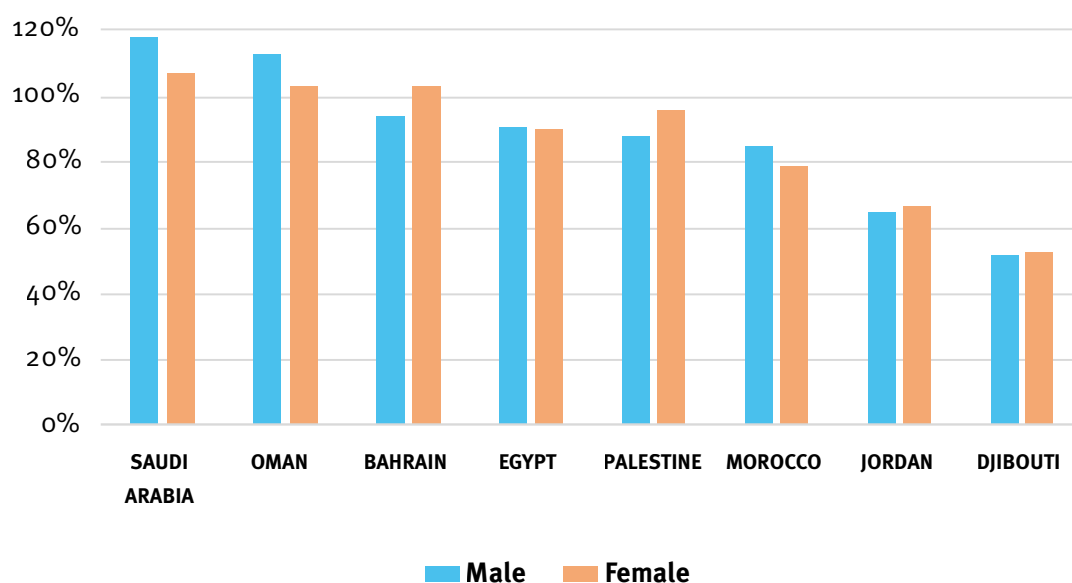

Source: World Bank (2021c).
*Data from 2018.
*Note*s: The authors have only included countries for which data were available for the years 2018 and 2019. The data available for other countries in the Arab region were outdated: Iraq (2007), Lebanon (1985), Libya (2006), Somalia (2007), Sudan (2017), Syria (2013), the UAE (2017).

Target 4.2. *By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education*

Indicator 4.2.2. Participation rate in organized learning (one year before the official primary entry age), by sex

Figure 20. Participation rate in organized learning (one year before the official primary entry age) (%)
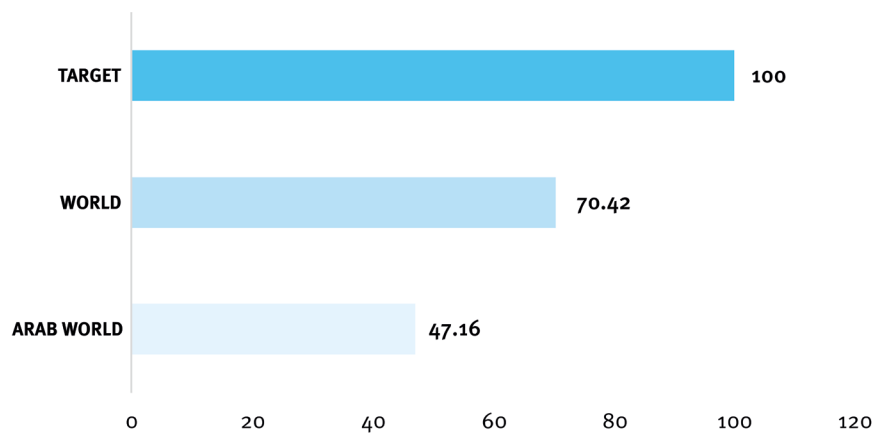
Source: ESCWA (2020b).

Notes: The calculated Arab regional aggregate includes the data values of the following countries and years: Algeria (2011); Syria, the UAE and Yemen (2013); Comoros (2014); Palestine (2015); Bahrain, Egypt, Kuwait, Lebanon, Morocco, Oman, Qatar and Saudi Arabia (2016); Djibouti (2017). Data on Iraq, Jordan, Libya, Somalia, Sudan and Tunisia were unavailable.

Additionally, more than 16 million children in the region were out of school, including 10 percent of primary school-age children and 32 percent of upper secondary school-age children (ESCWA, 2020b). Overall, girls are more likely than boys to be out of school. The higher the level of education, the wider this gap becomes (ESCWA, 2020b). The World Bank data shows that in 2019, 15.7 percent of male adolescents at the lower secondary age were out of school compared with 19.9 percent of female adolescents although gender parity was mostly achieved across the region in terms of primary and secondary enrolment (ESCWA, 2020b). This trend tends to reverse later as girls become more likely to pursue their studies while boys dropout from secondary school to support the household (ESCWA, 2020b).

The increasing number of out-of-school children in the region is attributed to ongoing armed conflicts in Iraq, Syria and Yemen as well as rising poverty, which often forces children to work at an early age to support their families. Out of the 7 million school-age children in Yemen, 2 million are currently out of school due to the conflict. In Syria, over 2 million children remain out-of-school and 1.3 million children are at risk of dropping out (UNDP, 2020d). In addition, Arab children living in poor areas were at least four times less likely to enrol in school and five times less likely to complete primary education compared with children in higher-income groups (ESCWA, 2020b; UNICEF, 2019a).

School closures to contain the pandemic

The consequences of school closures are concerning in the Arab region where children were already facing exclusion, in terms of access to and quality of education. Close to 100 million students were out of school in the Arab region during the first wave of the pandemic (**Table 16**; ESCWA, 2020e). Distance learning has emerged as an alternative to school teaching during the lockdown. However, many students and communities across the region, particularly those in vulnerable situations, are facing additional challenges in accessing education due to the sudden shift to digitization. A report published by ESCWA indicated that around 47 million students (representing the majority of enrolled students in the region) faced significant disruptions and needed training and assistance to adapt to this new method of teaching (ESCWA, 2020e).

Table 16. School closures and affected learners in the Arab States region by country in mid-March, beginning of October and mid-December 2020

	Affected learners in mid-March 2020	Affected learners at the beginning of October 2020	Affected learners in mid-December 2020
EGYPT	26,071,893	Academic break	Partially open
ALGERIA	11,093,218	Academic break	Fully open
MOROCCO	8,943,156	Partially open	Fully open
SAUDI ARABIA	8,410,264	8,410,264	8,410,264
SUDAN	8,375,193	Academic break	8,375,193
IRAQ	7,435,696	7,435,696	Academic break
SYRIA	4,188,528	Partially open	Partially open
JORDAN	2,372,736	Partially open	2,372,736
LIBYA	1,885,226	Partially open	Academic break
PALESTINE	1,626,357	Partially open	Partially open
LEBANON	1,363,393	1,363,399	Partially open
UNITED ARAB EMIRATES	1,362,359	Partially open	Academic break
OMAN	900,153	Academic break	Partially open
KUWAIT	777,169	777,169	777,169
QATAR	343,524	Partially open	Partially open
BAHRAIN	292,429	292,429	Partially open
YEMEN	Partially open	Fully open	Fully open
TUNISIA	Academic break	Partially open	Partially open
DJIBOUTI	Fully open	Fully open	Fully open
Source: UNESCO (2021).			

Inequalities in learning

Inequalities are likely to be exacerbated and the closure of schools is likely to disproportionately affect the most vulnerable children. Learning in the wealthiest families is likely to be less affected by school closures for several reasons: wealthy families have access to digital learning via Internet access and computer resources, are more likely to be able to afford out-of-pocket expenses for tutors and have an environment and space that is conducive to learning. However, children in the poorest families are unlikely to have access to the resources and environment required to succeed at distance learning. As a result, children from poorer families will return to school with a lag in learning due to gaps in access to remote learning. The basis for this argument is that lower educational loss occurs in wealthier households during holiday periods, due to better support and learning opportunities (Cooper and others, 1996; World Bank, 2020c).

School dropouts have increased the risk of child marriage and exposure to domestic violence and poverty (ESCWA, 2020e). Save the Children (2020) estimates that 72,000 more girls in the MENA region are at risk of child marriage in the next five years while 7,000 additional girls are at a higher risk of adolescent pregnancy in the next year. In addition, after missing out on substantial educational material, students may have a lack of interest in returning due to the extra burden of catching up on this material (World Bank, 2020c).

Inequalities in digital access

COVID-19 has significantly increased reliance on the Internet for educational purposes. At the same time, the pandemic has exposed the digital divide in the Arab region as the disadvantaged segments of society and those living in poorer countries are less likely to have access to the Internet than their counterparts in higher-income countries (Raz, 2020). In addition, in the Inclusive Internet Index— developed by the Economist Intelligence Unit (2020)—the ranking and scores of selected MENA countries point to significant discrepancies at the level of access and usage as well as the availability and affordability of the Internet (**Table 17**; The Economist Group Intelligence Unit, 2020). The digital divide and discrepancy in Internet usage across the region remain a challenge, making distance learning difficult and less accessible despite governments' efforts to minimize students' learning losses during the lockdown (ESCWA, 2020e).

A report by UNICEF in partnership with the International Telecommunication Union (ITU) highlighted that only 26 percent of children and youths (0–25 years old) in MENA[23] have access to the Internet at home (**Figure 21**; UNICEF and ITU, 2020). There are significant inequalities between countries; for example, WHO indicates that the percentage of individuals using the Internet in Yemen was 26.7 percent compared with 95.5 percent in Bahrain, Qatar and the UAE (WHO, 2020d). More generally—and apart from the GCC countries—only 51.6 percent of households in Arab countries have Internet access. Access to the Internet even varies within countries, as 35 percent of children living in urban areas can access the Internet from their homes compared with only 16 percent of children in rural areas, with both percentages below global averages (**Figure 22**). Furthermore, socio-economic inequalities are apparent in access to the Internet, as 53 percent of children in the richest quintile have access to the Internet at home compared with 9 percent of children in the poorest quintile (**Figure 23**; WHO, 2020d). A survey conducted by UNICEF (2020b) found that only 55 percent of the surveyed children (in Algeria, Egypt, Jordan, Morocco, Qatar, Syria and Tunisia) who were enrolled in education before the pandemic were able to access some kind of remote learning after schools were closed. The survey also showed that students enrolled in private schools before the pandemic were more likely to have access to distance learning than those enrolled in public schools. In addition, there is a gender gap in Internet access in the Arab region. The ITU data show that only 47 percent of the female population in the Arab States[24] were using the Internet in 2019 compared with 61 percent of the male population. The regional divide in accessing the Internet exceeded the global gender gap in 2019, with ITU data indicating that 48 percent of the female population were using the Internet compared to 55 percent of the male population (ITU, 2020).

However, home access to the Internet does not necessarily qualify distance learning as an effective learning method for all children. In particular, digitalized education is likely to be less effective in early childhood education as children aged 4–8 years have lower capacity to engage independently with resources, and the success of remote learning may depend largely on the computer and teaching skills of teachers and parents. Learning is cumulative and early childhood education is integral for all future learning, thus negative impacts on early childhood education may lower learning trajectories for an entire generation (World Bank, 2020c). This is also supported by data from parents with nearly 50 percent of them stating their concerns about the damage that the pandemic is having on their children's learning experience (UNICEF, 2020b).

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[23] The MENA region is a regional grouping used by UNICEF and covers Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, the UAE and Yemen. Although this region includes Iran and Israel (which are non-Arab states) and does not cover all Arab States covered in this report, it is used in this paper due to its significant regional overlap with the Arab region.
[26] The ITU's "Arab States" classification includes the 22 countries of the Arab league: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen.

Table 17. Ranking by availability and affordability of Internet services in selected Arab countries (pre-pandemic, February 2020)

Overall ranking and score			Availability			Affordability		
Rank out of 100 countries		Score (0–100)	Rank out of 100 countries		Score (0–100)	Rank out of 100 countries		Score (0–100)
24	**KUWAIT**	79.1	5	**UAE**	83.1	14	**KUWAIT**	84.8
28	**QATAR**	78.5	11	**QATAR**	79.8	42	**QATAR**	70.3
38	**UAE**	74.9	15	**BAHRAIN**	79.2	46	**SAUDI ARABIA**	68.2
41	**BAHRAIN**	73.8	24	**KUWAIT**	78	55	**UAE**	64.7
43	**SAUDI ARABIA**	73.3	37	**OMAN**	73.4	63	**EGYPT**	62
44	**OMAN**	72	44	**SAUDI ARABIA**	70.8	64	**BAHRAIN**	61.8
59	**MOROCCO**	65.5	51	**MOROCCO**	67.5	67	**MOROCCO**	60.2
60	**LEBANON**	64.4	52	**LEBANON**	67.2	69	**ALGERIA**	59.7
65	**EGYPT**	62	58	**EGYPT**	64	69	**OMAN**	59.7
74	**ALGERIA**	56.7	71	**ALGERIA**	56.1	74	**LEBANON**	57.7

Source: The Economist Group Intelligence Unit (2020).
*Note*s: The scores are from 0–100 where 100 indicates the most inclusive Internet environment. The rank is out of the 100 countries in the index, where 1 is the highest rank. The ranking was released in February 2020 and covers the pre-pandemic period. The ranking and scores for Djibouti, Iraq, Jordan, Libya, Palestine, Somalia, Sudan, Syria, Tunisia and Yemen were not available.

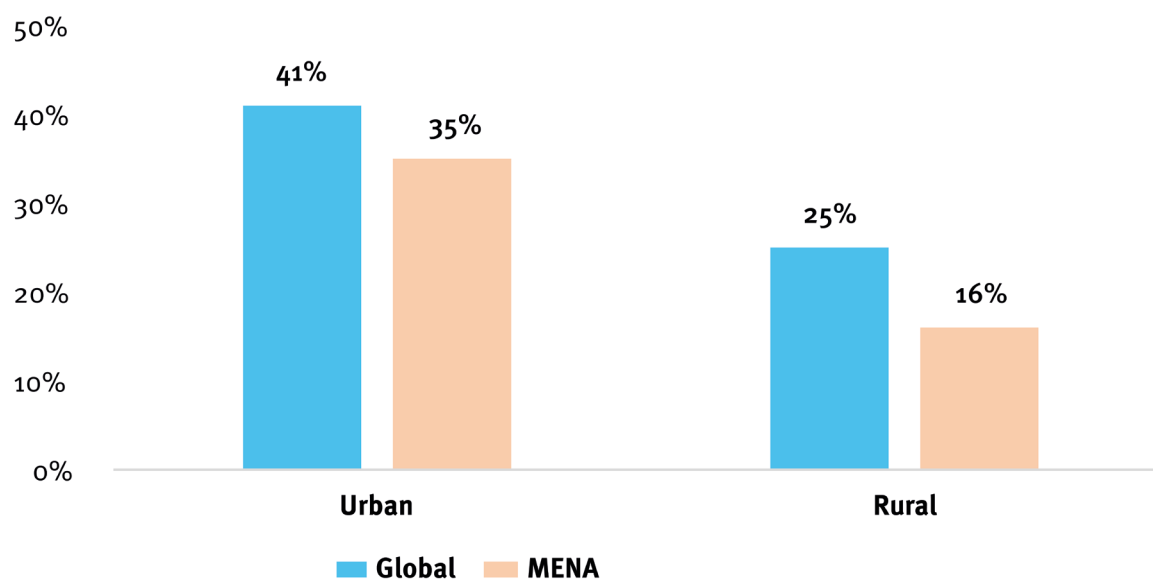**Figure 21. Percentage of children and young people with Internet access at home in MENA, compared with global averages**
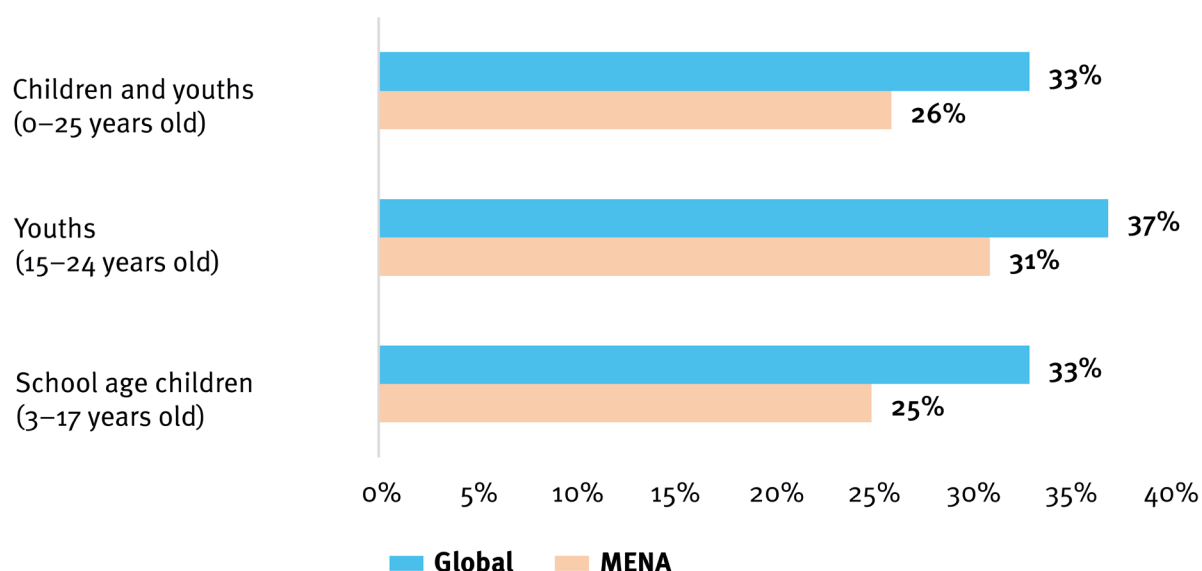
Source: UNICEF and ITU (2020).
*Note*s: UNICEF's MENA classification includes Algeria, Egypt, Iraq, Jordan, Morocco and Tunisia. Data on Bahrain, Djibouti, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, the UAE and Yemen were not available.

Figure 22. Percentage of children and young people aged 25 years or under with Internet access at home in MENA, by type of residential area

Source: UNICEF and ITU (2020).
*Note*s: UNICEF's MENA classification includes Algeria, Egypt, Iraq, Jordan, Morocco and Tunisia. Data on Bahrain, Djibouti, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, the UAE and Yemen were not available.

Figure 23. Percentage of children and young people from the poorest and wealthiest quintiles with Internet access at home in MENA

Source: UNICEF and ITU (2020).
*Note*s: UNICEF's MENA classification includes Algeria, Egypt, Iraq, Jordan, Morocco and Tunisia. Data on Bahrain, Djibouti, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, the UAE and Yemen were not available.
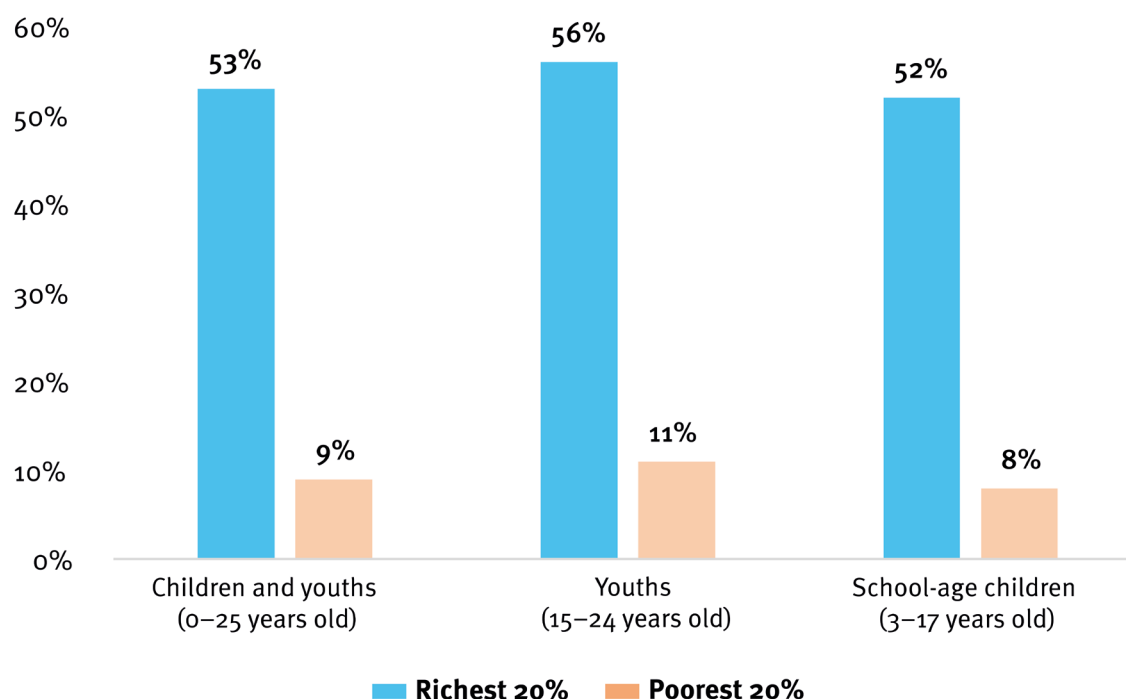
Section 2: The pandemic is likely to worsen an already poor quality of education and result in learning losses with long-lasting effects for this generation of students

Pre-pandemic: Learning poverty and weak quality of education systems

Even before the onset of the pandemic, the Arab region was facing a learning crisis limiting its ability to strengthen human capital by providing the skills and knowledge needed for the jobs of the future. Ensuring complete and high-quality education remains a challenge as the region still faces high levels of "learning poverty," which means that a significant percentage of children are unable to read and understand a short, age-appropriate text by the age of 10 (**Figure 24**; World Bank, 2019a).[25]

Figure 24. Learning poverty for select Arab countries: percentage of children at late primary age who are not proficient in reading, adjusted for the percentage of out-of-school children
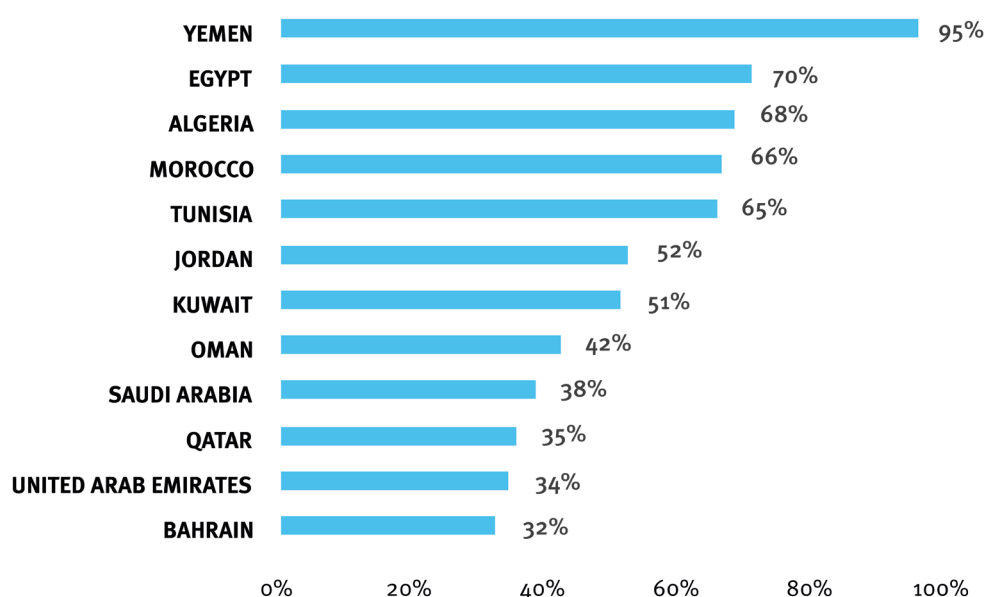
Source: World Bank (2019a).
Note: Data compiled from Learning Poverty Briefs available for Arab countries. There are data gaps for several countries—indicators are outdated and rely on surveys conducted before 2019. Data on Djibouti, Iraq, Lebanon, Libya, Palestine, Somalia, Sudan and Syria were not available.

Other indicators illustrate poor learning outcomes across the region; for example, Arab students perform poorly in international assessments of learning outcomes and in some Arab countries more than half of children do not meet the lowest benchmark (ESCWA, 2020b). Based on the SDG 4 indicator reported[26] in the ASDR (2020), the regional aggregate shows that only 44 percent of students[27] at the end of lower secondary education achieve at least a minimum proficiency level in mathematics, lagging behind the world average (of 50 percent) and far below the 100 percent global target set for 2030 (**Figure 25; Figure 26**; ESCWA, 2020e).

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[25] Definition of "learning poverty" from the World Bank's Middle East and North Africa Learning Poverty Briefs.
[28] Indicator 4.1.1: Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex. This indicator falls under target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
[29] The calculated Arab regional aggregate includes the data values of the following countries and years: Palestine (2011); Bahrain, Egypt, Jordan, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Tunisia and the UAE (2015). The regional aggregate excludes Algeria, Djibouti, Iraq, Kuwait, Libya, Palestine, Somalia, Sudan, Syria and Yemen.

Factors contributing to poor performance include traditional teaching methodologies and outdated curricula that devalue analytical and problem-solving skills essential for lifelong learning and more innovative labour markets. Government spending on education is also limited in much of the region and does not allow for investment in professional development and qualifications for teachers to integrate modern teaching and assessment methods (ESCWA, 2020b; UNICEF, 2019a).

Target 4.1. *By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes*
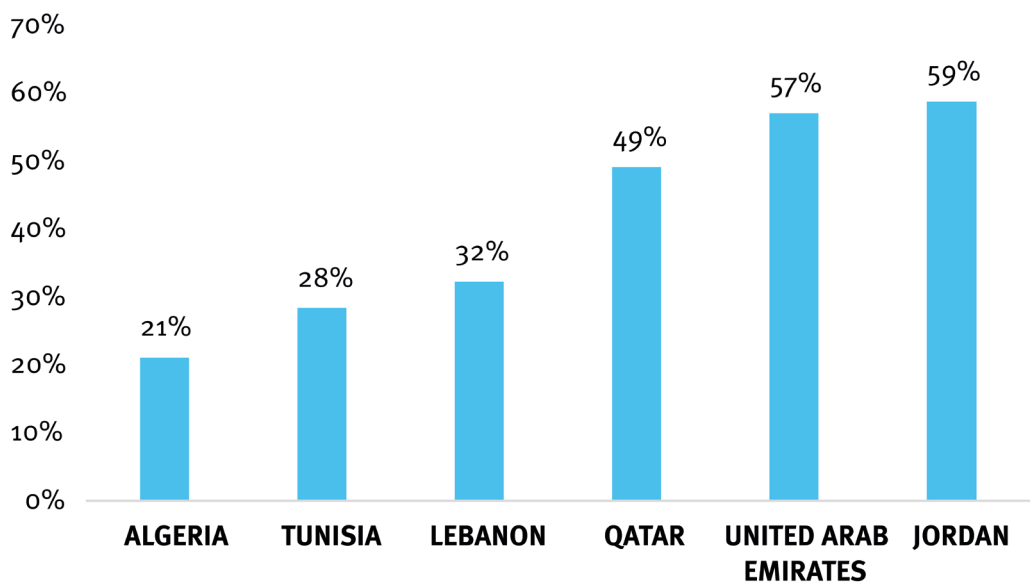
Indicator 4.1.1. Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

Figure 25. Proportion of students at the end of lower secondary education achieving at least a minimum proficiency level in reading (2018)

Source: UNDP (2020c).
Note: Data for Algeria and Tunisia are for 2015. Data for other Arab countries were not available on the Arab Development Portal.

Figure 26. Proportion of students in grade two or three and at the end of lower secondary education achieving at least a minimum proficiency level in mathematics (2015)
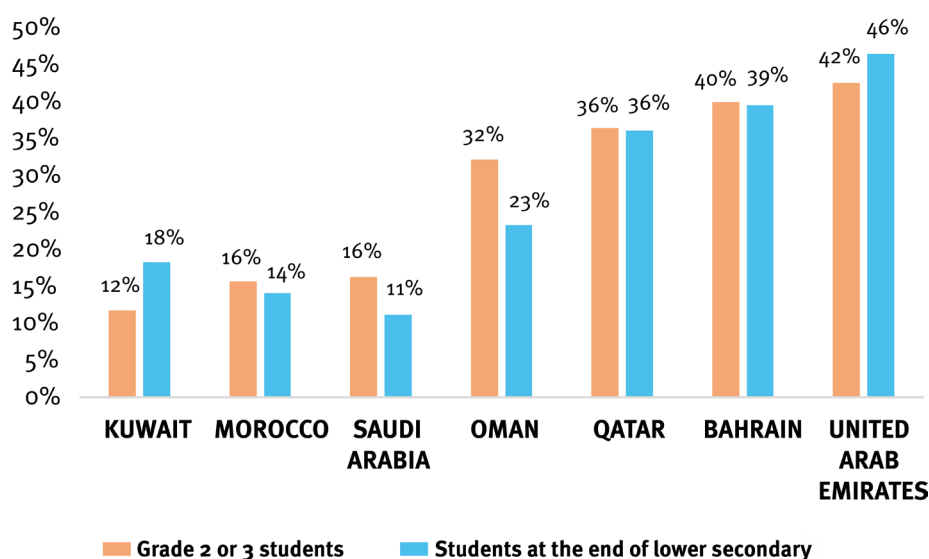
Source: UNDP (2020c).
Note: Data on Algeria, Djibouti, Egypt, Iraq, Jordan, Lebanon, Libya, Palestine, Somalia, Sudan, Syria, Tunisia and Yemen were not available.

There are also significant differences between the quality of education in poor and affluent areas (**Figure 27**; **Figure 28**). In fact, poor households rely exclusively on public schools and cannot afford private schooling and tutoring which often offer a higher quality of education. Therefore, the segregation of the educational systems across the region and the limited investment in public education services pose additional challenges to poor students. These issues explain the underperformance of the region's LDCs—which lack the funds to invest in education systems—in terms of literacy rates, access to education, gender parity and the quality of education (ESCWA, 2020b; UNICEF, 2019a).

Figure 27. Proportion of students at the end of lower secondary education achieving at least a minimum proficiency level in reading, by socio-economic background

Source: UNDP (2020c).
Note: Data for Algeria and Tunisia cover 2015. Data on Bahrain, Djibouti, Egypt, Iraq, Kuwait, Libya, Morocco, Oman, Palestine, Saudi Arabia, Somalia, Sudan, Syria and Yemen were not available.
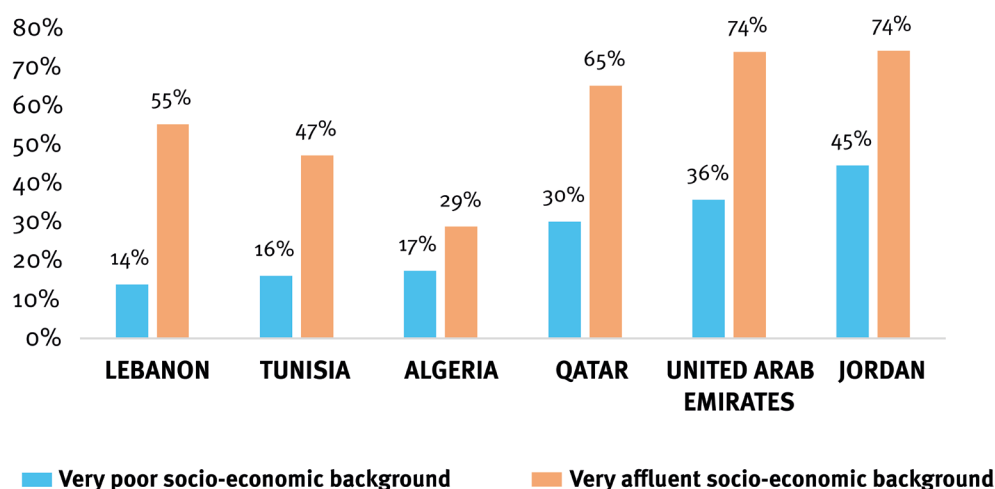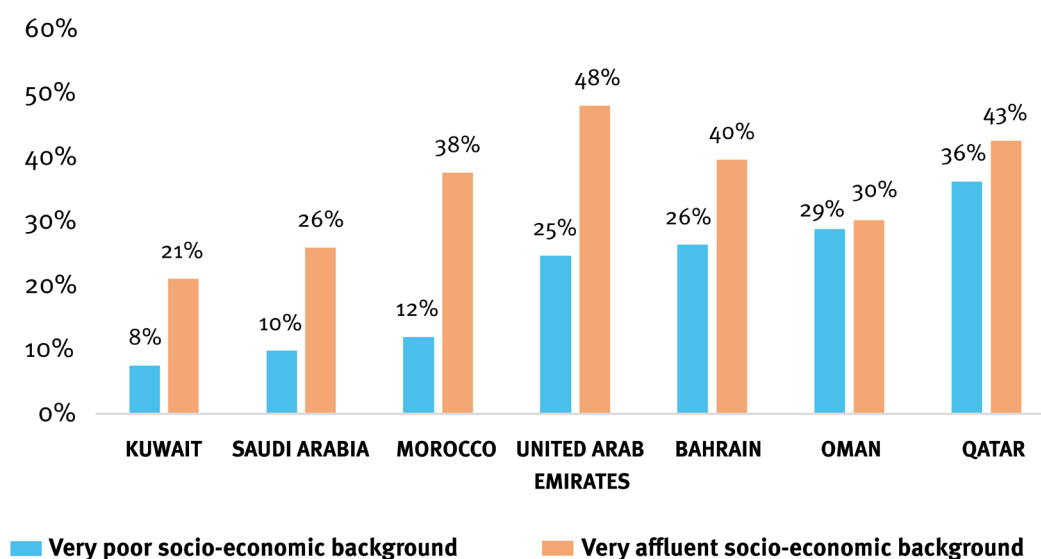
Source: UNDP (2020c).
Note: Data for Algeria, Djibouti, Egypt, Iraq, Jordan, Lebanon, Libya, Palestine, Somalia, Sudan, Syria, Tunisia and Yemen were not available.

Exacerbation of learning poverty in low-income countries in the Arab region

School closures and disruptions in teaching are likely to limit access to education and could lead to lower retention rates and poorer learning outcomes, particularly among disadvantaged and vulnerable segments of the population. In December 2020, the World Bank estimated that the pandemic could push 72 million children globally into learning poverty (both in terms of out-of-school children and students below the minimum proficiency level in reading). The World Bank simulations also indicated that the learning poverty rate could potentially increase by 10 percent (from 53 to 63 percent) in poor and MICs due to the disruptions resulting from the pandemic (World Bank, 2020b). In addition, investment in public education will be negatively affected by decreasing government spending and will lead to a deterioration in the quality of education, particularly for the segments of the population who depend on public schooling (see **Box 5**).

Projections of learning losses in Middle East and North Africa (MNA)

Azevedo and others (2020b) estimated the impact of school closures on learning losses using different dimensions and three scenarios. Their most optimistic scenario highlights that the Arab region is set to have reduced quantity and quality of schooling. **Table 18** summarizes the key findings of this study in the region under each simulation.

> a) **Optimistic scenario: assuming that school closures would last for only three months of a 10-month school year and that mitigation measures and alternative teaching methods are well implemented and highly effective.**

> b) **Intermediate scenario: assuming that school closures would last for five months and that alternative teaching methods have a middle level of effectiveness.**

> c) **Pessimistic scenario: assuming that school closures would last for seven months and that mitigation measures and remote learning have low levels of effectiveness.**

Gross primary and secondary school completion rates

Gross primary and secondary completion rates are set to deteriorate, particularly in countries where the rates were low before the pandemic. In addition to learning losses, UNDP estimates show that the pandemic would reverse the estimated increases of gross primary and secondary completion rates that were projected for 2020 in a no COVID-19 scenario in countries where the rates were below 100 percent prior to the pandemic (**Table 19**; **Table 20**).

Table 18. Simulations examining the impact of school closures on Learning-Adjusted Years of Schooling according to three scenarios

Simulation 1: The first simulation looked at the impact of school closures on the stock of Learning-Adjusted Years of Schooling. This metric adjusts the years of schooling (quantity) to the quality that students are getting and is used in the World Bank's Human Capital Index

	Baseline	Optimistic scenario	Intermediate scenario	Pessimistic scenario
Global	7.9 years of schooling	7.6 years of schooling (↓ 3 months)	7.3 years of schooling (↓ 6 months)	7.0 years of schooling (↓ 9 months)
MENA	7.6 years of schooling	7.4 years of schooling (↓ 2 months)	7.1 years of schooling (↓ 5 months)	6.7 years of schooling (↓ 9 months)

Simulation 2: The second simulation estimated learning losses resulting from school closures in terms of Programme for International Student Assessment (PISA) scores. This simulation built on the findings and the scenarios of the first analysis. The PISA is an international assessment that measures 15-year-old students' reading, mathematics, and science literacy every three years.

	Baseline	Optimistic scenario	Intermediate scenario	Pessimistic scenario
Global	PISA score: 440	433	424	413
MENA	PISA score: 400	393	384	374

The PISA score in MENA was below the global average before the pandemic.

Simulation 3: The third simulation estimated the increase in number of students who are below a minimum proficiency as a result of school closures. The PISA Minimum proficiency level (MPL) is the benchmark of basic knowledge in a domain (mathematics, reading, etc.) measured through learning assessments.

	Baseline	Optimistic scenario	Intermediate scenario	Pessimistic scenario
Global	40%	47%	50%	53%
MENA	55%	61%	65%	68%

Source: Azevedo and others (2020b).

Table 19. Gross primary completion rates (%)

Country	Pre-COVID-19: 2018	2020			2030		
		Scenario 1: No COVID-19 (2020)	Scenario 2: COVID-19 baseline scenario (2020)	Scenario 3: COVID-19 high damage scenario (2020)	Scenario 1: No COVID-19 (2030)	Scenario 2: COVID-19 baseline scenario (2030)	Scenario 3: COVID-19 high damage scenario (2030)
SAUDI ARABIA	118.5	120.2	119.9	119.8	106.6	106.8	106.9
ALGERIA	114.7	106	105.7	105.6	103.2	103.3	103.5
KUWAIT	107	106.9	106.6	106.5	107	107.3	107.2
UAE	106.9	107.1	106.8	106.7	102.8	103.1	103.4
OMAN	104.9	104.7	104.2	104.2	99.58	100.4	99.48
TUNISIA	103.7	105.1	104.7	104.7	97.74	97.59	97.41
LIBYA	101.9	104.7	104.8	104.8	102.2	103	102.8
IRAQ	101.6	103.5	103	102.9	100.5	100.3	99.31
BAHRAIN	101	101.4	101.3	101.3	101.7	101.9	101.8
QATAR	99.75	102	101.8	101.8	101.6	101.9	102.3
EGYPT	98.28	99.3	99.22	99.18	98.45	98.59	98.74
MOROCCO	96.89	98.07	97.7	97.65	97.27	97.36	97.29
PALESTINE	96.85	97.37	96.93	96.87	99.99	100.2	99.81
LEBANON	85.25	86.93	86.04	86.01	91.64	90.64	87.36
JORDAN	79.93	85.18	84.98	84.94	89.24	88.81	88.44
SOMALIA	75.96	81.78	81.65	81.61	94.38	93.86	92.15
SUDAN	69.73	74.09	73.9	73.86	80.96	81.08	80.14
YEMEN	67.79	70.11	69.89	69.84	75.11	71.82	71.28
DJIBOUTI	60.65	64.85	64.68	64.64	77.23	77	76
SYRIA	84.83	90.44	90.44	90.40	100.6	100.8	100.1

Source: UNDP (2020b).
Note: Blue cells indicate an increase in gross primary completion rates while red cells indicate a decrease.

Table 20. Gross secondary completion rates (%)

Country	Pre-COVID-19 (2018)	2020			2030		
		Scenario 1: No COVID-19 (2020)	Scenario 2: COVID-19 baseline scenario (2020)	Scenario 3: COVID-19 high damage scenario (2020)	Scenario 1: No COVID-19 (2030)	Scenario 2: COVID-19 baseline scenario (2030)	Scenario 3: COVID-19 high damage scenario (2030)
SAUDI ARABIA	105.5	105.5	103.8	103.5	102.3	101.9	101.3
BAHRAIN	86.97	87.63	86.06	85.71	92.05	91.18	90.17
OMAN	75.18	75.71	72.99	72.71	82.89	82.64	78.79
LIBYA	73.9	77.28	77.28	77.28	86.22	95.63	96.72
EGYPT	65.18	65.61	65.13	64.82	67.87	67.1	66.37
UAE	64.88	68.6	67.08	66.83	83.14	81.87	80.54
IRAQ	63.57	64.74	63.22	63.16	72.1	69.93	65.57
QATAR	63.17	68.78	67.5	67.23	93.54	93.55	92
ALGERIA	62.56	64.09	62.54	62.27	65.74	65.12	63.43
PALESTINE	62.45	61.55	59.42	59.27	60.32	60.78	58.82
JORDAN	53.2	53.27	51.68	51.34	55.88	55.16	54.49
TUNISIA	49.23	51.07	48.82	48.44	56.9	56.02	54.37
LEBANON	45.95	45.65	41.95	41.95	53.22	52.7	48.91
MOROCCO	45.77	47.36	45.47	45.04	53.43	52.13	50.25
SUDAN	38.57	37.89	36.23	35.88	39.78	40.19	38.19
SYRIA	31.47	33.82	33.82	33.82	48.65	48.8	47.04
YEMEN	31.43	31.59	30.12	29.79	36.02	30.95	29.9
DJIBOUTI	25.98	29.19	27.71	27.4	41.7	41.1	39.95
SOMALIA	8.805	9.743	8.672	8.363	15.5	13.9	12.44

Source: UNDP (2020b).
Note: Blue cells indicate an increase in gross secondary completion rates while red cells indicate a decrease.

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG 8 promotes both the sustainability and inclusiveness of economic growth. Within the SDG 8 framework, economic policies and interventions should not only aim to prioritize economic growth; they should also focus on sustainability and inclusiveness to align economic growth with the creation of decent jobs.

Within the framework of Sen's (1997 and 1999) capabilities approach, employment can be considered a means for increasing individual and collective human capabilities. Decent work and the associated social protection expand people's functionings and freedoms. The threat posed by the COVID-19 pandemic to employment and decent work is therefore also a direct threat to human capabilities, choices and freedoms.

Achieving the different targets of SDG 8 has direct implications for ending poverty (SDG 1), decreasing inequalities (SDG 10) and improving livelihoods and well-being (SDG 2, 3 and 4). It is also dependent on fiscal and policy spaces, and the ability of governments and institutions to allocate resources and provide quality services and infrastructure (SDG 3 and 4). Moreover, progress on SDG 8 is directly linked to SDG 4 (education), since education plays a significant role in shaping labour market policies and in economic diversification.

Background: SDG 8 Coverage and Overall Performance in the Arab Region

The SDG 8 indicators reported in the ASDR 2020 show that the Arab region still lags behind other regions and is in need of urgent reforms to achieve the SDG 8 targets (ESCWA, 2020b).

The region's underperformance can be explained by several factors, including the absence of socio-economic policies and governance structures to support an inclusive economy, and other challenges related to the structure of their economies and their inability to create decent and more productive jobs (ESCWA, 2020b). The following sections offer an overview of the structure of the region's economies and labour markets, and the implications of COVID-19, which are expected to exacerbate the region's structural challenges and further impede efforts to achieve SDG 8.

COVID-19 economic shocks and losses

The pandemic has spread at a rapid pace, infecting millions of people around the world, and forcing countries to impose lockdowns and restrict the movement of people. These measures have brought economic activities to a near standstill. Despite the gradual reopening observed since May/June 2020, global economies and markets have not fully recovered and are still battling an uncertain future. The interruption of economic activities and intermittent reopening of businesses (see **Control measures to contain the spread of the virus**) are costly for countries that do not have the fiscal resources to respond to the economic shocks and offset the substantial losses of livelihoods.
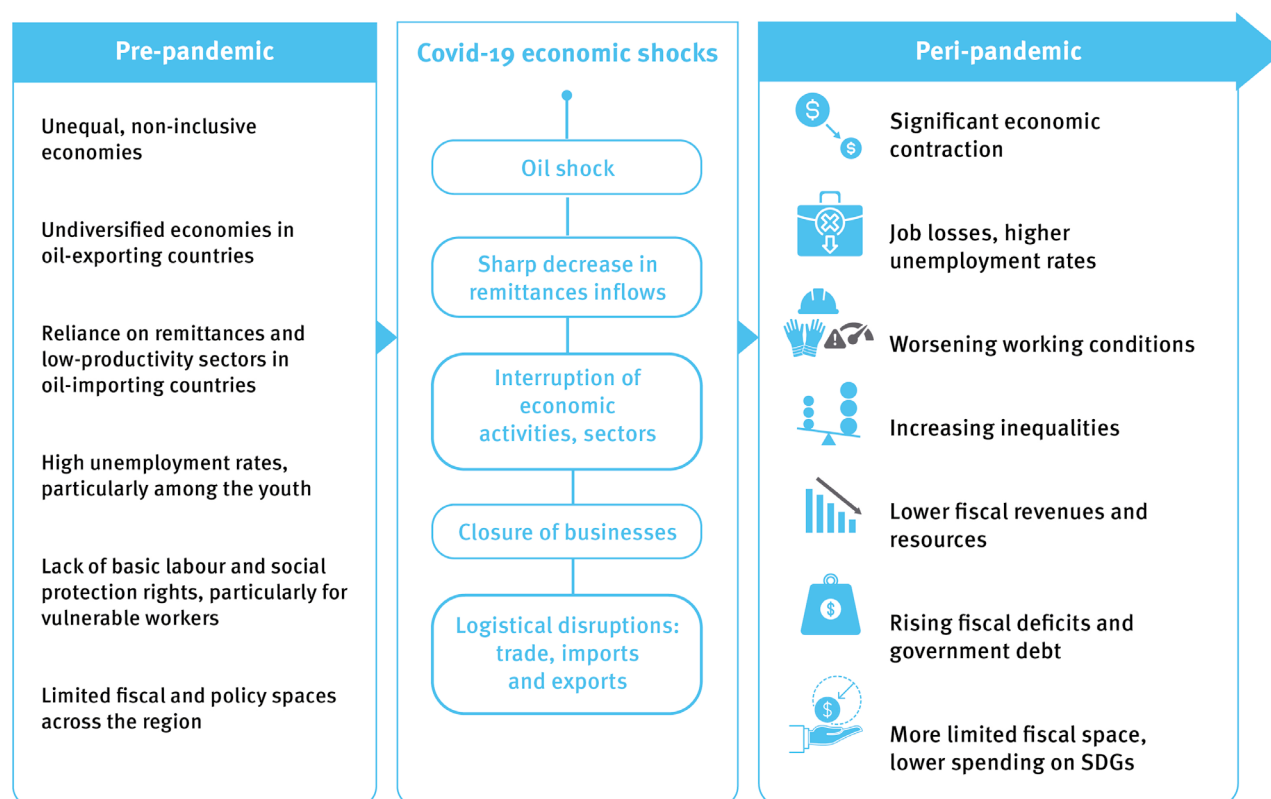
In June 2020, the World Bank forecast that the global economy will contract by 5.2 percent in 2020, constituting the deepest global recession in decades with a "historic contraction of per capita income" not witnessed since 1870 (World Bank, 2020d). Under the current circumstances, countries around the world are suffering from several economic headwinds at once due to the sudden pressure on health care systems, the collapse of oil prices, the disruption of trade and touristic activities, the dwindling of remittances, and substantial job and income losses (World Bank, 2020d).

Scope

The targets and indicators were chosen based on a mapping between SDGs and the MPI, and focus mostly on employment (UNDP and OPHI, 2020). Additional estimates from the 2020 ASDR and the IMF World Economic Outlook were used to illustrate the macroeconomic developments in the region before and during the pandemic (particularly for economic growth) (ESCWA, 2020b and IMF, 2020c). The analysis was complemented by a macroeconomic framing (**Figure 29**) that takes into account the structure of the economies in the Arab region and the context before the pandemic. **Box 5** discusses the fiscal challenges that the region will face because of the pandemic and how this could affect investment and financing of the SDGs.

SDG 8 target	Indicator
Target 8.1. Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent GDP growth per annum in the least developed countries	**8.1.1.** Annual growth rate of real GDP per capita
Target 8.2. Achieve higher levels of economic productivity through diversification, technological upgrading and innovation including through a focus on high-value added and labour-intensive sectors	**8.2.1.** Annual growth rate of real GDP per employed person
Target 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	**8.5.2.** Unemployment rate, by sex, age and persons with disabilities
Target 8.7. Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	**8.7.1.** Proportion and number of children aged 5-17 years engaged in child labour, by sex and age

Figure 29. Macroeconomic framing: studying the repercussions of the pandemic in the Arab region and their impact on human development in light of the pre-existing macroeconomic challenges

Pre-pandemic	Covid-19 economic shocks	Peri-pandemic
Unequal, non-inclusive economies	Oil shock	Significant economic contraction
Undiversified economies in oil-exporting countries	Sharp decrease in remittances inflows	Job losses, higher unemployment rates
Reliance on remittances and low-productivity sectors in oil-importing countries	Interruption of economic activities, sectors	Worsening working conditions
High unemployment rates, particularly among the youth	Closure of businesses	Increasing inequalities
Lack of basic labour and social protection rights, particularly for vulnerable workers	Logistical disruptions: trade, imports and exports	Lower fiscal revenues and resources
Limited fiscal and policy spaces across the region		Rising fiscal deficits and government debt
		More limited fiscal space, lower spending on SDGs

Section 1: The losses resulting from the pandemic will further slow economic growth across the region

Pre-pandemic: Arab economies were facing a slowdown even before the pandemic

Policies in the region have not addressed the inequality gap between the wealthiest and poorest segments of populations, and have not focused on developing the structure of the labour market to absorb a growing and educated labour force, or offer better working conditions. The Arab region – along with Latin America – is considered the world's most unequal region with the top 10 percent of its population controlling 56 percent of national income in 2019 (Moshrif, 2020). This inequality translates into rising inequalities across different dimensions, including access to education, health care systems and social protection. Other estimates point to more accentuated inequalities. An ESCWA report (2020a) indicates that the wealthiest 10 percent of adults in the Arab region accounted for 76 percent of the region's total household wealth, totalling $5.8 trillion in 2019 while the poorest half of the population held around only 2 percent of total household wealth.

The ASDR report for 2020 indicates that the growth rate of GDP per capita has slowed down over the past decade, with more than half the countries showing negative trends, including all GCC countries (ESCWA, 2020b). More recent data from the IMF also points to slow GDP per capita growth in 2019, which stood at -1.7 percent in Arab MICs,[28] -0.9 percent in GCC countries, 0.6 percent in Arab conflict-affected areas[29] and 4.5 percent in Arab LDCs (IMF, 2020c).

While the estimates show that conflict-affected countries and LDCs grew at a faster rate than GCC and Arab MICs in 2019, real GDP growth for these countries was well below the 7 percent growth per annum included in target 8.1 for the LDCs (**Table 21**) (IMF, 2020c). This is mainly driven by oil-exporting conflict-affected countries, including Iraq and Libya, where growth is volatile.

Target 8.1. *Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries*

Indicator 8.1.1. Annual growth rate of real GDP per capita

Table 21. Real GDP and per capita GDP growth, 2019

	Real	Per capita
GLOBAL	**2.8%**	**1.6%**
GCC	**0.7%**	**-0.9%**
BAHRAIN	1.8%	1.6%
KUWAIT	0.4%	-2.3%
QATAR	0.8%	-0.5%
SAUDI ARABIA	0.3%	-1.6%
UNITED ARAB EMIRATES	1.7%	-1.3%
OMAN	-0.8%	-1.2%
ARAB MICs	**2.6%**	**-1.7%**
EGYPT	5.6%	3.2%
MOROCCO	2.2%	1.1%
JORDAN	2.0%	0.3%
TUNISIA	1.0%	-0.1%
LEBANON**	-6.9%	-6.8%
ALGERIA	0.8%	-1.2%
ARAB CONFLICT-AFFECTED AREAS*	**4.0%**	**0.6%**
YEMEN	2.1%	-0.6%
LIBYA	9.9%	8.8%
IRAQ**	4.4%	1.8%
PALESTINE	0.9%	-1.5%
ARAB LDCs*	**4.3%**	**4.5%**
DJIBOUTI**	7.5%	4.6%
SUDAN	-2.5%	-5.3%
SOMALIA	2.9%	NA

Source: IMF (2020c), based on the authors' calculations.
Note: *The authors calculated these aggregates using the IMF's GDP constant prices referred to in the ESCWA Grouping classification above (GCC, Arab MICs, Arab conflict-affected areas and Arab LDCs). **2019 data for Lebanon, Iraq and Djibouti are estimates.

[30] Arab MICs include Algeria, Egypt, Jordan, Morocco, Lebanon and Tunisia.
[31] Arab conflict-affected areas include Iraq, Libya, Palestine and Yemen. Data for Syria are not available in the IMF database.

Despite intensifying efforts to diversify their economies, as per target 8.2, the contribution of the hydrocarbon sector to GDP and total exports of oil-producing countries remains significant, particularly in the GCC (**Figure 30**).

Target 8.2. *Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors*

Figure 30. Contribution of the hydrocarbon sector in the economies of oil-exporting countries, 2018 (%)[30]
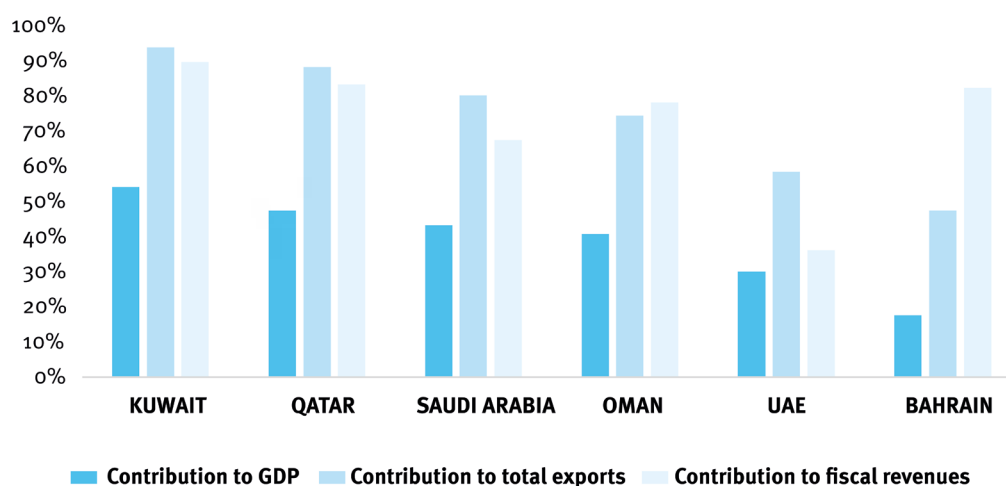
Source: World Bank (2019b).

On the other hand, oil-importing countries still depend largely on low-productivity sectors (traditional agriculture and services that are part of informal-sector activities) and are unable to raise the industrial sector's contribution to their economies, with remittances representing a sizeable source of income (more than 5 percent) for countries such as Jordan, Lebanon, Palestine and Yemen (**Figure 31**) (IMF, 2020b).

Figure 31. Received personal remittances (% of GDP)
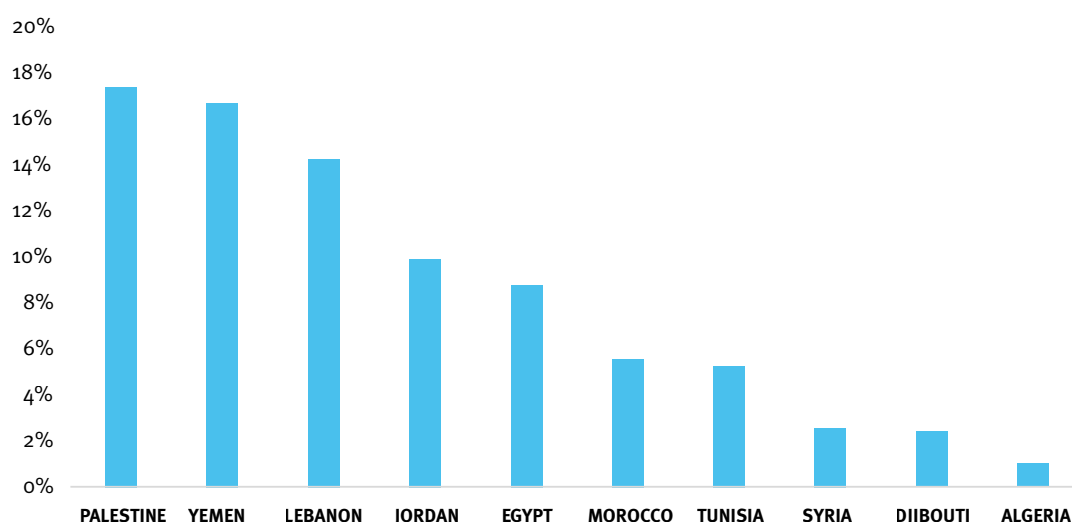
Source: World Bank (2021d).
Note: Data for Yemen, Lebanon, Jordan, Egypt, Morocco, Tunisia, Djibouti and Algeria are from 2019; 2018 for Palestine, and 2007 for Syria. Data for Iraq, Kuwait, Qatar, Oman and Saudi Arabia were not included because the received personal remittances represent less than 0.5 percent of GDP. Data are not available for Bahrain, Libya, Somalia, Sudan and UAE.

[30] All data are from 2018 except for Kuwait, for which they represent projections for 2019.

This makes oil-exporting countries particularly susceptible to pandemic-related drops in oil prices, with knock-on effects on countries that rely on remittances from them. In summary, inadequate macroeconomic policies and a lack of reforms did not pave the way for more equal, productive and diversified economies in the Arab region. This is translated into poor performance on indicator 8.2.1 for target 8.2: real GDP per employed person contracted by 0.5 percent in 2017, compared with a world growth average of 3.36 percent, with a more substantial contraction in LDCs (-4.6 percent) and GCC (-3.7 percent)[31] (ESCWA, 2020b).

The Arab region is contending with a dual shock and substantial economic losses.

The pandemic came at a time when the region was already facing a slowdown in the economy. The economic fallout and disruptions are expected to result in significant ramifications given the region's pre-existing vulnerabilities and the absence of social protection systems to absorb shocks. The global drop in oil prices, in the context of lower global demand resulting from worldwide interruption and disruptions of economic activities, also hit the region's economies hard in 2020. Economic growth in the Arab region remains susceptible to international oil price fluctuations. As **Figure 30** has shown, oil-exporting countries still rely heavily on oil revenues, while lower oil prices would potentially affect inflow of remittances and international development funds to oil-importing countries (ESCWA and UNSDG, 2020).

The IMF projections in October 2020 pointed to an economic contraction of 5 percent in 2020 across the Arab region (2020b). However, there are important disparities in the outlook for subregions, which are characterized by different economic structures and dynamics, as shown in **Table 22**. Real GDP is expected to decrease by 1.7 percent in Arab LDCs, 3.4 percent in Arab MICs and 6.1 percent in GCC countries in 2020, with substantial declines in real GDP per capita growth. The crisis is exacerbating humanitarian and economic challenges in conflict-affected countries, which are the hardest hit by the pandemic (IMF, 2020b). Real GDP in these countries is projected to contract by almost 16 percent in 2020, while real GDP per capita is expected to drop by 22 percent.

GCC economies were affected by the sharp decline of oil prices on the back of a globally lower demand as well as the oil production cuts that were committed under the new Organization of the Petroleum Exporting Countries (OPEC) agreement in the third quarter of 2020. Therefore, the IMF projected real oil GDP to contract by 6.2 percent in 2020 (IMF, 2020a). In addition, the lockdown and restriction measures have weighed on non-oil sectors, with non-oil GDP projected to shrink by 5.9 percent in 2020 (IMF, 2020a). These losses will slow the multiple initiatives at increasing diversification in these countries.

The disruption faced in tourism activities, the decline in tourist arrivals (see **Box 3**) and the projected decrease in remittance flows to the Arab region are expected to result in substantial losses in Arab MICs and LDCs. The World Bank estimated that remittance flows to MENA would drop by 8 percent in 2020 (World Bank, 2020a). This significant decline is the result of weak economic growth and employment levels as well as a drop in oil prices (World Bank, 2020a). The interruption of this source of income is particularly problematic in several countries where remittances contribute to more than 5 percent of GDP (**Figure 31**) and the IMF has warned that the effect on poverty will mostly be felt in Sudan and Yemen (IMF, 2020b). The decline in remittances could have a long-lasting effect on the economies of the region, as it could lead to lower investments and consumption spending, as well as limited access to education and health care services for recipient households (WFP, 2020b).

The economies of the region are projected to recover in 2021 with real GDP growth estimated at 6.1 percent in Arab conflict-affected areas, 4.4 percent in Arab LDCs, 3.4 percent in Arab MICs (excluding Lebanon),[32] and 2.2 percent in GCC countries. However, the growth outlook remains uncertain (**Table 22**). The length of the crisis and the possible economic recovery of the region depend on several factors, including the stabilization of global oil prices, the reopening of economies and certain sectors (particularly tourism; see **Box 3**), the willingness of donor countries to contribute, and the recovery of remittance flows (ESCWA, 2020h). This uncertainty is compounded by the slow vaccine roll-out observed in some countries in the region and the imposition of new lockdowns to control new waves of infection (IMF, 2020c).

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[31] The ASDR's calculated Arab regional aggregate includes the data values for all Arab countries in 2017.
[32] Real GDP growth for MICs in 2021 does not include Lebanon (data not available in IMF). We compared the subregional aggregate GDP at constant prices for 2021 with the subregional aggregate GDP at constant prices for 2020 (excluding Lebanon).

Table 22 presents the growth rate of real GDP and real GDP per capita for 2020 and 2021, based on the IMF's estimation. This estimated evolution of indicator 8.1.1 summarizes the overall effects on economic activity of local policies as well as more regional and global disruptions in trade and remittances.

Target 8.1. *Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7 per cent per annum GDP growth in the least developed countries*

Indicator 8.1.1. Annual growth rate of real GDP per capita

Table 22. Real GDP and per capita GDP growth rates, 2020 and 2021 estimates

|	Real, 2020	Real per capita, 2020	Real, 2021	Real per capita, 2021
GLOBAL	-4.4%	-5.6%	5.1%	4.0%
GCC	-6.1%	-7.7%	2.2%	0.1%
BAHRAIN	-4.9%	-6.8%	2.2%	0.2%
KUWAIT	-8.1%	-10.6%	0.6%	-2.1%
OMAN	-10.0%	-12.6%	-0.5%	-3.5%
QATAR	-4.5%	-4.7%	2.5%	2.3%
SAUDI ARABIA	-5.4%	-7.3%	3.1%	1.1%
UAE	-6.6%	-9.3%	1.3%	-1.7%
ARAB MICs*	-3.4%	-12%	3.4%*	2.3%**
ALGERIA	-5.5%	-7.2%	3.2%	1.3%
EGYPT	3.5%	1.2%	2.8%	0.4%
JORDAN	-5.0%	-6.3%	3.4%	2.3%
LEBANON	-25.0%	-24.7%	N/A	N/A
MOROCCO	-7.0%	-7.9%	4.9%	3.9%
TUNISIA	-7.0%	-8.0%	4.0%	3.0%
ARAB CONFLICT-AFFECTED AREAS*	-16.0%	-21.8%	6.1%	8.4%
IRAQ	-12.1%	-14.3%	2.5%	-0.1%
LIBYA	-66.7%	-67.0%	76.0%	74.3%
PALESTINE	-12.0%	-14.1%	8.2%	5.7%
YEMEN	-5.0%	-7.4%	0.5%	-2.0%
ARAB LDCs*	-1.7%	-3.7%	4.4%	4.1%
DJIBOUTI	-1.0%	-3.7%	7.0%	4.1%
SOMALIA	-1.5%	N/A	2.9%	NA
SUDAN	-8.4%	-10.7%	0.8%	-1.8%

Source: IMF (2020c).
Note: *The authors calculated these aggregates using the IMF's GDP constant prices and by referring to the ESCWA Grouping classifications mentioned earlier. Real GDP growth for MICs in 2021 does not include Lebanon (data not available in IMF). **We compared the subregional aggregate GDP at constant prices for 2021 with the subregional aggregate GDP at constant prices for 2020 (excluding Lebanon).

Box 3

The travel and tourism industry contributes significantly to GDP and employment in Arab economies. As per **Figure 32**, the travel and tourism sector accounted for more than 5 percent of GDP and jobs in Egypt, Jordan, Lebanon, Morocco, Tunisia and the UAE in 2018.

Figure 32. Contribution of travel and tourism sector to GDP and employment in select Arab countries, 2018
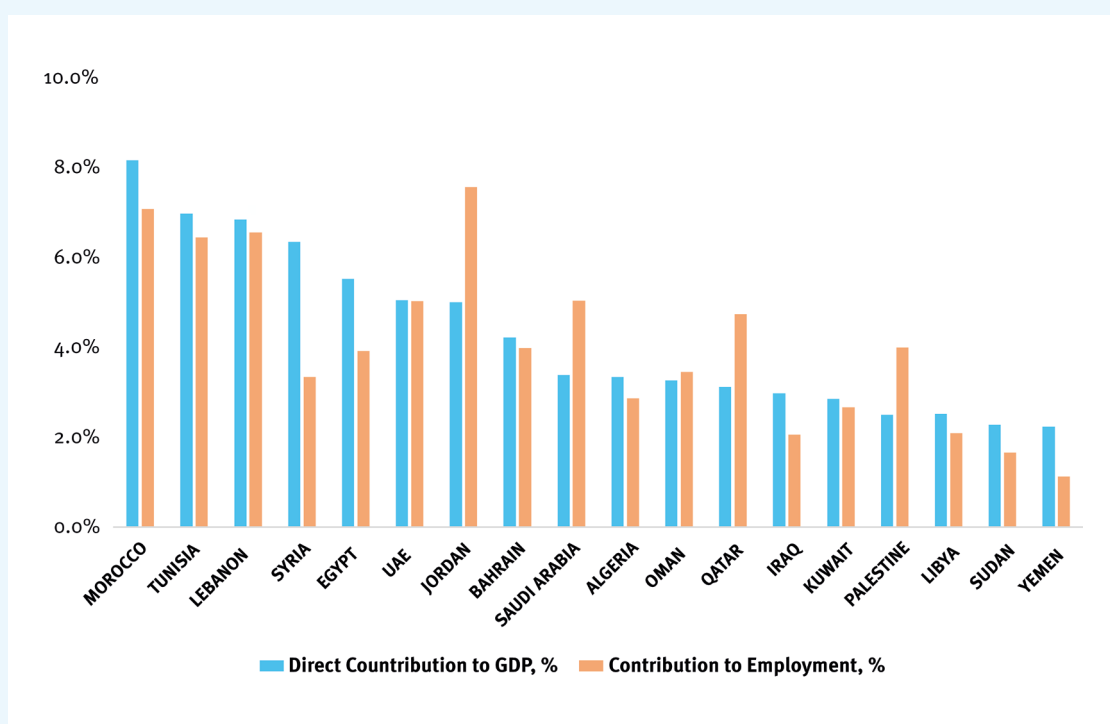
Source: World Bank (2021b), and PCBS and Palestine, Ministry of Tourism and Antiquities (2019, 2020).
Note: Data for Djibouti, Palestine and Somalia were not available from the World Bank. Data for Palestine were found through the PCBS.

Data from the World Tourism Organization (UNWTO) show that the Middle East is the second-most affected region globally, with tourist arrivals dropping by 73 percent between January and October 2020 as a result of the restrictions on non-essential travel, global challenges in containing the virus and low consumer confidence (2020).

The IMF estimated that a six-month disruption of non-essential travel in the Middle East and Central Asia[35] could reduce GDP and employment growth by up to 5 percent on average, with Jordan, Lebanon and Morocco severely affected (**Table 23**) (2020b). Countries that rely heavily on tourism faced devastating consequences, not only due to the interruption of international flights and non-essential travel, but also as a result of lower domestic tourism activity due to the lockdown and closures of hotels, restaurants and entertainment facilities.

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[35] The scenario analysis by the IMF includes other countries in the Middle East and Central Asia that are not covered in this assessment (Afghanistan, Armenia, Azerbaijan, Djibouti, Georgia, Iran, Kazakhstan, the Kyrgyz Republic, Pakistan, Tajikistan, Turkmenistan and Uzbekistan).

The economies of GCC countries also suffered from economic losses following the cancellation of the annual Hajj pilgrimage in Saudi Arabia and the one-year postponement of Expo 2020 Dubai. These events were predicted to attract around 30 million people (2 million pilgrims to Saudi Arabia and 25 million tourists to the UAE) (Yousef, Zaqiri and Belaïd, 2020). There is evidence that the travel and tourism activities could take several years to recover from the shock. In the case of the 2008 financial crisis and Arab uprisings, five years on, tourism receipts remained well below their pre-crisis levels in the Arab region, particularly in Egypt and Morocco. The 2014–2015 oil shock also led to a drop in tourism inflows in Egypt, Jordan and Morocco. The IMF warns of a slower and more challenging recovery for the tourism and travel sector off the back of this global economic recession and its negative effects on consumption and wealth, and also given the uncertainty as to whether certain countries will be able to reopen for tourism, particularly in light of recent surges of infection (IMF, 2020b).

Table 23. Impact of COVID-19 on select economies in the region: initial estimates

MOROCCO	▪ The National Confederation of Tourism (CNT) highlighted that tourist revenues in Morocco dropped by 51 percent between January and November 2020, with the number of tourist arrivals 82 percent lower than in January–November 2019 (2021). ▪ More than 35 percent of employees lost their jobs and around 80 percent of companies operating in the sector faced income losses.
TUNISIA	▪ Central Bank data showed that tourism revenues in Tunisia contracted by 65 percent in 2020 from 2019 (Reuters, 2021). ▪ Reports published earlier in 2020 warned that up to 400,000 jobs in the sector could be lost and that declines in revenues could reach $1.4 billion (Abouzzohour, 2020).
PALESTINE	▪ In September 2020, the PCBS and Ministry of Tourism and Antiquities projected that losses in the tourism sector would exceed $1 billion between March and December 2020 (2020). ▪ Around 10,000 jobs out of 43,000 in the sector were lost in the second quarter of 2020 (PCBS and Palestine, Ministry of Tourism and Antiquities, 2020).
JORDAN	▪ The National Aviation and Tourism Academy (NATA) highlighted that Jordan's tourism revenues declined by 81 percent in 2020 from 2019 (Zawya, 2021). ▪ The Chairman of Jordan Inbound Tourism Operators estimated that 35,000 jobs would be lost in 2020 due to the closure of tourism offices, hotels, transport and travel agents (Kebede and others, 2020). ▪ A survey conducted by Ipsos in the first months of the lockdown, covering 290 enterprises, reported that 68 percent of enterprises operating in the travel and tourism sector were concerned about their future. In addition, the vast majority of the enterprises surveyed (94 percent) indicated that they were facing a high level of financial difficulty (Kebede and others, 2020).

Section 2: The pandemic exposed the region's pre-existing labour market vulnerabilities and losses will be felt disproportionately across the region

Pre-pandemic: high unemployment rates and heavy reliance on the informal sector

The slowdown in economic growth discussed in Section 1 and the absence of labour market policies have resulted in a weak labour demand across the region, which is unable to meet the growing labour supply. According to the ASDR 2020 (ESCWA, 2020b), the Arab region had the highest unemployment rate in the world, estimated at 9.8 percent in 2019 compared with a world average of 5.4 percent (World Bank, 2021e). Women are more likely to be unemployed, with women's unemployment rates recorded at 20.3 percent in 2017, compared with 8.1 percent for men (World Bank, 2021e) (**Figure 33**).

Target 8.5. *By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value*

Indicator 8.5.2. Unemployment rate, by sex, age and persons with disabilities

Figure 33. Unemployment rate by sex, 2017
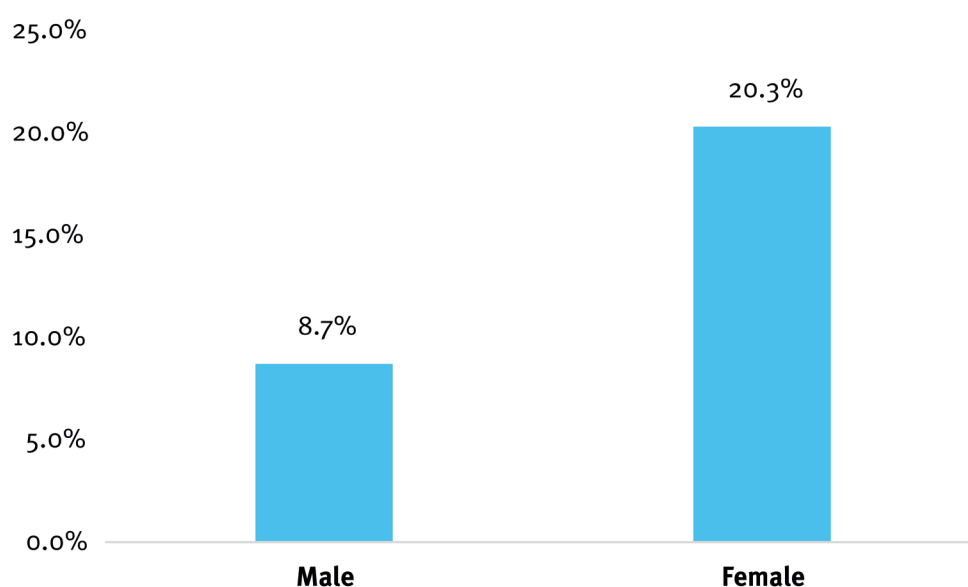
Source: ESCWA (2020b).
Note: The calculated Arab regional aggregate includes the data values for the following Arab countries and years: Lebanon and Sudan (2009); Iraq, Kuwait and Syria (2011); Libya and Bahrain (2012); Jordan and Yemen (2014); and Algeria, Egypt, Morocco, Qatar, Saudi Arabia, Palestine, Tunisia and the UAE (2016). Data for Somalia, Djibouti and Oman were missing.

Arab youth unemployment remains the highest and the fastest growing worldwide, increasing from 19.5 percent to 23 percent between 2012 and 2020. Unemployment among young Arab women stands at 42.1 percent, almost twice the rate for men (ESCWA, 2020e). In addition to limited economic opportunities, youth in the region face challenges in the school-to-work transition due to the mismatch between educational systems, vocational training and labour market needs (SDG 4). Moreover, over 25 million Arab youth were NEET, representing 18 percent of the region's youth population. Rates are even higher in specific countries (45 percent in Yemen, 32 percent in Palestine and 28 percent in Egypt) (ESCWA, 2020b, 2020e). [36]

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[36] See case study.

The prevalence of child labour was also rising before the pandemic. This was especially the case in households facing financial difficulties due to loss of assets and livelihoods, particularly in countries affected by conflict and displacement (UNICEF, 2019a). Up-to-date data on child labour in the Arab region are unavailable, but some reports include estimates. The ASDR (ESCWA, 2020b) indicated that 6.1 percent of children in the Arab region were engaged in economic activity and 7.8 percent were engaged in economic activities and household chores (**Figure 34**). Other reports indicated that a quarter of Yemeni children aged between 5 and 14 years were engaged in child labour, compared with 7 percent in Egypt, 5 percent in Iraq and 2 percent in Tunisia (UNICEF, 2019a).

Target 8.7. *Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms*

Indicator 8.7.1. Proportion and number of children aged 5-17 years engaged in child labour, by sex and age

Figure 34. Proportion of children engaged in economic activity and in both economic activity and household chores
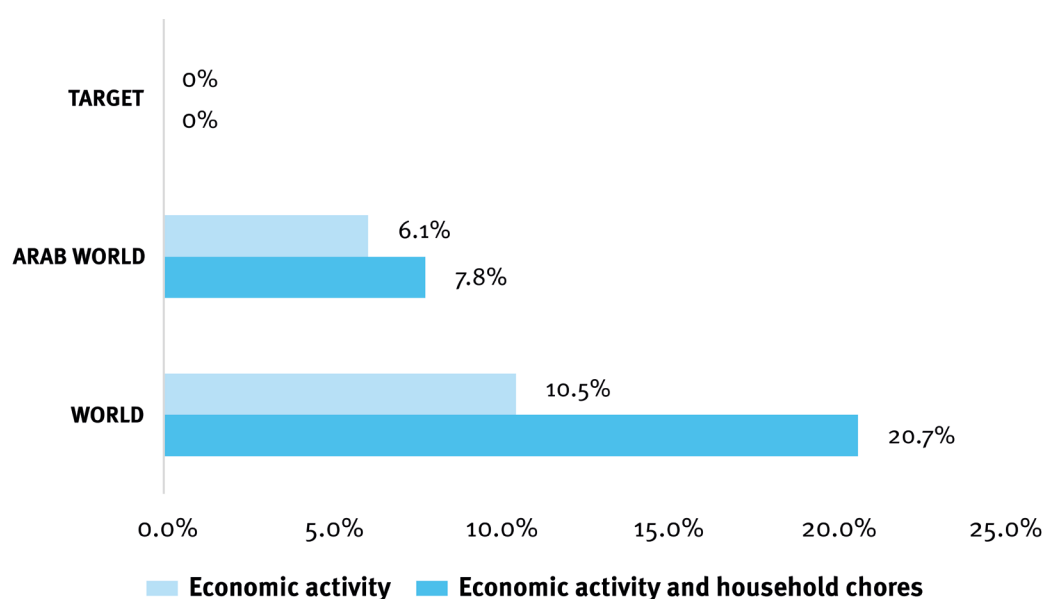
Source: ESCWA (2020b).
*Note*s: The calculated Arab regional aggregate includes the data values for the following Arab countries and years: Palestine (2010); Iraq, Mauritania and Tunisia (2011); Algeria and Comoros (2012); Egypt and Sudan (2014), and Jordan (2016). Data for the following countries were missing: Bahrain, Djibouti, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, UAE and Yemen.

The region has a highly informalized labour force with employment in the informal sector representing 63.9 percent of jobs in the Middle East and 56.3 percent in North Africa (Abdo and Almasri, 2020). This trend is more alarming for young working-age Arabs, with different estimates showing that around 80–85 percent of youth in the region have informal jobs (ESCWA, 2020b and Abdo and Almasri, 2020). With informality in labour practices becoming the norm across many countries, the majority of workers were excluded from social protection and public health services and many engaged in poor-quality, low-productivity work that is often concentrated in sectors with irregular and insecure income. Although the Arab region hosts 15 percent of global migrants and refugees,[37] its labour laws fail to provide minimal protection for this category of workers, who face discrimination on several grounds (ESCWA, 2020c). Migrant workers in the Gulf and domestic workers in Lebanon and Jordan governed by Kafala sponsorship system are excluded from social and labour security protection.

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[37] There were than 40 million migrant workers and refugees in the Arab region in 2019.

These systems deny workers their most basic labour rights including the freedom to leave their country of residence, transfer their employment contract or resign from their job without the consent of their sponsor or until the expiry of their contract (Abdo and Almasri, 2020 and ESCWA, 2020h). This severe deficit in protection for marginalized communities and workers made the region vulnerable to any social or economic shocks, let alone shocks of the magnitude of the COVID-19 pandemic.

The impact of COVID-19 on unemployment rates and work conditions

The pandemic is resulting in a profound and adverse impact on global labour markets, particularly on workers in the informal sector, the self-employed, daily-wage earners and workers in industries that are facing significant disruptions. The Sustainable Development Goals Report for 2020 states that 1.6 billion workers in the informal economy – which represent half of the global workforce – have been affected by unemployment and underemployment resulting from the pandemic (United Nations Department of Economic and Social Affairs [UNDESA], 2020). The report also estimates that informal workers' income has been reduced by 60 percent in the first month of the crisis and by up to 81 percent in some regions. The region is expected to witness an increase in its already high unemployment rates resulting from business closures, salary suspensions and lockdowns (**Table 24**). The International Labour Organization (ILO) Monitor published in January 2021 estimated that working hours dropped by 9 percent in the Arab States and 10.4 percent in Northern Africa in 2020 compared with the final quarter of 2019. These projections show that the pandemic has already wiped out the equivalent of 5 million full-time jobs in the Arab States and 6 million full-time jobs in Northern Africa. The ILO (2020) expected recovery in 2021 to be modest with high levels of uncertainty, and subject to deteriorate further if the region faces a second wave of infections and strict lockdowns. ESCWA (2020h) highlighted that around 31.4 percent of the Arab workforce (39.8 million workers) were at economic risk because of the pandemic. A report by Oxford Economics estimated that employment in the GCC could shrink by 13 percent, with job losses projected at 1.7 million in Saudi Arabia and 900,000 in the UAE. These losses would particularly affect foreign workers and result in an "expat exodus" with a 10 percent reduction in the population in some GCC countries (ESCWA, 2020c and Mathew, 2020).

Table 24. ESCWA projected increases in unemployment rates for 2020 and 2021 (percentage points)

	2020	2021
JORDAN	2.7	3.7
LEBANON	1.8	2.9
MOROCCO	2.8	3.5
QATAR	2.0	-
SAUDI ARABIA	1.4	1.8
SOMALIA	0.6	-
TUNISIA	2.2	2.9
UAE	2.8	-
Source: ESCWA (2020).		

Public health measures and restrictions have meant that informal workers have been unable to report to work—due to the business and workplace closures – and faced a significant decrease in demand for their services (particularly for tourism and other domestic services). In particular, control measures are leading to a permanent loss of income for workers who are not sufficiently covered by social protection and social insurance schemes. These challenges are severely affecting migrant workers in Arab States, who are often engaged in the informal sector, and are on the front line of the pandemic response, providing essential services. Due to their concentration in temporary and precarious employment, migrant workers are more likely to depend on daily wages, and interruptions resulting from the lockdown put them at a higher risk of losing their incomes and livelihoods without access to any social protection schemes (ESCWA, 2020c). Migrant workers also tend to live in overcrowded accommodations and congested

settlements without access to sanitation and clean water, which increases their risk of contracting COVID-19 (ESCWA, 2020c).The pandemic has shed the light on the precariousness of around 35 million migrant workers living in GCC countries who are facing mass redundancies, forced repatriation and uncertainty about their residence in the region. Several initiatives were launched by GCC governments to protect workers and enforce social and physical distancing in the workplace. For example, the Bahrain Ministry of Labour and Social Development issued an administrative circular for employers in the private sector to reduce the number of migrant workers in labour accommodations and enforce physical distancing measures. The Saudi authorities issued a royal decree to provide free health care and services for migrants, including testing and emergency services (ESCWA, 2020c). However, migrant workers remain vulnerable to the losses brought about by the pandemic, as well as accelerated workforce nationalization efforts as some businesses in Bahrain, Kuwait, Oman and Saudi Arabia resorted to pay cuts and replacing migrant workers with nationals (Alsahi, 2020).

There are no estimates or projections capturing the impact of the pandemic on rising child labour in the Arab region. However, there are risks that the situation of children living in vulnerable communities and those who were already engaged in child labour may worsen in light of the recent income losses and increased economic insecurity that households are facing. Evidence from LMICs shows that previous economic crises, which led to a material deterioration of living standards, often resulted in an increase in child labour and reversed the progress achieved in children's enrolment at schools, particularly in the absence of social protection schemes and interventions (ILO and UNICEF, 2020).

The lack of updated and regularly published disaggregated data does not allow for an accurate assessment of the losses faced in each sector. Furthermore, the outlook remains uncertain as the region faces additional lockdowns and restrictions due to the recent waves of infections, which may also complicate the reintegration into the workforce of workers who lost their jobs. In **Box 4**, we summarize the findings of the most recent household and labour surveys as well as rapid assessments conducted in several countries, to better understand how the pandemic is affecting employment across the region.

Box 4

Key findings from the ILO rapid assessment in Iraq (June 2020) (Kebede, Stave and Kataa, 2020c)[38]

Around a quarter of respondents who were employed before the pandemic indicated that they had lost their jobs permanently due to the pandemic. The lay-offs were concentrated among young workers, with 36 percent of those aged 18 to 24 years reporting that they had lost their jobs. Employees' earnings in this sample are expected to have declined by 40 percent from before the pandemic by May 2020. The most significant drops were reported for workers with no previous written contracts. These workers are facing job and income losses. The majority of households reported having received neither cash transfers (81 percent) nor in-kind assistance (74 percent) three months after the start of the pandemic (March–June 2020). Eighty-one percent of households are taking on more debt to cope with the deterioration of the financial situation given that only 16 percent of surveyed households had savings. The survey findings also show that a very limited number of households (only 22 percent) were actually aware of the measures taken by the government to mitigate the impact of the pandemic on employment and job losses.

Key findings from the ILO rapid assessment in Lebanon (April 2020) (Kebede, Stave and Kataa, 2020b)[39]

The majority of respondents (84 percent) reported losing their jobs temporarily or permanently due to the pandemic, with lay-offs more common for Syrian workers. Only 11 percent indicated that they were working during the lockdown, while 2 percent were on paid leave. Ninety-four percent of respondents reported significant income reductions (mainly due to lay-offs or fewer working hours): salaries are estimated to have decreased by two-thirds in March 2020 from previous 12 months for both Syrians and Lebanese workers.[40] Respondents had access to very limited support during the crisis: only 12 percent (18 percent of Syrians, 3 percent of Lebanese people) and 23 percent (29 percent of Syrians, 17 percent of Lebanese people) indicated having received cash transfers and in-kind assistance, respectively.

Key findings from the ILO rapid assessment in Jordan (April 2020) (Kebede, Stave and Kataa, 2020a)[41]

Around half of the respondents who were employed before the lockdown (47 percent) indicated that they had lost their job by mid-April 2020, with 13 percent permanently laid off, 18 percent reporting a temporary lay-off with work expected to resume once the pandemic is over, and 16 percent on paid leave. The majority (92 percent) reported a drop in their household income from the previous 12 months, particularly Syrian workers and those employed in informal arrangements (or employed verbally, without a formal written job contract). Only 9 percent said that their household had savings, with 70 percent indicating that their savings would last less than a month. The financial support distributed to families and households was also limited, with only 13 percent of respondents (20 percent of Syrians, 3 percent of Jordanians) reporting that they had received cash assistance, and only 17 percent (25 percent of Syrians, 5 percent of Jordanians) indicating that they had received in-kind support. In addition, more recent estimates from ESCWA (2021) point to a surge in the unemployment rate to 23 percent in the second quarter of 2020 from 19.3 percent in the first quarter.

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[38] Background on the sample: the data were collected between 16 and 30 June 2020, through telephone surveys with a sample of households and small-scale enterprises. The sample was randomly selected from existing databases maintained by collaborating humanitarian and development organizations. The report draws on interviews with 3,265 households and 1,175 enterprises.

[39] The assessment is based on data collected through a telephone sample survey of individual people and small-scale enterprises randomly selected from existing databases maintained by humanitarian and development organizations. The survey covered a sample of 1,987 Lebanese and Syrians (52 percent men and 48 percent women) and representatives of 363 small-scale enterprises.

[40] Lebanon has also been facing a financial crisis since October 2019. The Beirut Port explosion in August 2019 also resulted in significant economic losses, particularly for households living in vulnerable areas around Beirut.

[41] The rapid impact assessment is based on telephone surveys with an effective sample of 1,580 respondents including vulnerable Jordanian workers and Syrian refugees

Key findings from the labour survey published by the High Commission for Planning in Morocco covering the second quarter of 2020 (2020; Paul Delvaux and others, 2020)

The labour survey indicates significant job losses with the total number of jobs dropping by 600,000 across all sectors and regions in the second quarter of 2020 from the second quarter of 2019 (477,000 jobs in the agriculture sector[42] and 34,000 jobs in the services sector). The unemployment rate was estimated at 12.3 percent in the second quarter of 2020, increasing from 8.1 percent in the second quarter of 2019. Youth were the most affected, with the youth unemployment rate reaching more than 33 percent in the second quarter of 2020.

Key findings from the household survey conducted by Tunisia's National Institute of Statistics in collaboration with the World Bank between April and May 2020 (Kokas and others)[43]

In the first round of phone interviews, most of the respondents who were employed before the pandemic reported job losses or reductions in their incomes. Only a third of the respondents were able to continue their work and 40 percent of those who were not working during the period of the survey indicated that they were receiving full or partial salaries. In the second round of surveys, 41 percent of respondents who were employed before the pandemic indicated that they were still not working and the majority of surveyed family-owned businesses reported that they were either directly affected by the crisis (due to the closure of the business) or indirectly affected (facing losses due to lower demand for their services and difficulties in importing raw materials and transporting their goods). In addition, a report published by UNDP and Tunisia's Ministry of Development, Investment and Cooperation in July 2020 assessing the economic impact of the pandemic in Tunisia estimated that by the end of 2020, the unemployment rate could increase to 21.6 percent from 15 percent in 2019—which is the equivalent of 274,500 jobs lost.

Key findings from the household survey conducted in Yemen[44] in August 2020 by the Cash Consortium of Yemen (Agency for Technical Cooperation and others, 2020)[45,46]

Around half of the households surveyed (49 percent) reported that a family breadwinner had lost their job due to the closure of a business or interruption of construction work. Forty-four percent of respondents reported having lost their income from non-government salaried work and 23 percent from irregular work. Vulnerable Yemeni households are facing these losses with limited coping mechanisms. In fact, the majority of households (72 percent) reported not having any savings and simultaneously being in debt. Households across different governorates indicated that their debt had increased by 50 percent since the beginning of the pandemic.

Key findings from the household survey conducted by the PCBS between March and May 2020 (PCBS, 2020)[47]

More than half (54 percent) of the main households' breadwinners indicated that they were not able to report to work due to the lockdown and restriction measures which forced businesses and governmental entities to close. Income losses were substantial during this period with 52 percent of respondents reporting that their salary payments were completely interrupted during the period of the lockdown, while 25 percent received partial salaries and only 23 percent were being fully paid. The findings also show that the level of debt or credit to spend on household expenditure rose to 63 percent during the lockdown, with higher levels recorded in Gaza (79 percent) than in the West Bank (52 percent).

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[42] However, note that initial estimates show that Morocco's agricultural sector was mostly affected by a drought in 2020 (including the second quarter). See also www.ciheam.org/wp-content/uploads/2020/07/COVID-rapport-FINAL-1.pdf.

[43] The phone surveys covered 1,369 Tunisian households and were conducted in two rounds: the first round between 29 April and 8 May 2020 and the second round between 15 May and 21 May 2020.

[44] The country was already facing challenges including conflict, economic collapse, hunger, diseases and displacement before the pandemic.

[45] The Cash Consortium of Yemen (CCY) is a partnership between the Danish Refugee Council (DRC), the Norwegian Refugee Council (NRC), the Agency for Technical Cooperation and Development (ACTED) and the International Organization for Migration (IOM).

[46] The assessment was conducted in August 2020 based on a sample of 571 households in nine governorates (Aden, Al Dhale'e, Al Hudaydah, Amran, Hajjah, Lahj, Marib, Sana'a City and Taiz). The data were collected through both in-person interviews and phone interviews.

[47] The sample consisted of 9,926 households.

Box 5

THE FISCAL CHALLENGES RESULTING FROM COVID-19 AND THEIR IMPACT ON FINANCING SDGS IN THE REGION

The Arab region entered the pandemic with limited fiscal and policy spaces to finance public services and spending on socio-economic investments. The structural challenges and the economic slowdown witnessed over the last few years were also accompanied by rising fiscal deficits and higher debt levels, further limiting fiscal space and spending on infrastructure and quality services (Mathai and others, 2020). The IMF (2020) indicates that social spending in the Middle East, North Africa, Afghanistan and Pakistan region, which includes governmental spending on social protection, education and health, remains lower than in other parts of the world, with governments allocating 10.4 percent of GDP on average on social spending, compared with 14 percent of GDP on average in other emerging countries (Mathai and others, 2020). Even before the pandemic, the shortfall of resources allocated for spending on SDGs was significant. As an example, the median country in the Middle East and Central Asia (MCD) needed to increase its spending by at least 5.3 percent of GDP per year to achieve five critical SDGs including human, social and physical capital. This is a lower-bound estimate as it considers that spending efficiency is at the frontier. However, this is not the case for the MCD region where many countries allocate their resources less efficiently and thus require higher levels of spending (Mathai and others, 2020).

The fiscal losses resulting from the drop in tax revenues, tourism, remittances, trade and other economic activities and the fiscal cost of national COVID-19 responses further limit the region's fiscal space and result in higher levels of debt. If the economic contraction continues in the coming few months, the increasing debt financing burden will constrain further abilities to spend in the future.

A report published by the UNSDG in June 2020 indicates that lower fiscal revenues and unsustainable levels of debt not only weaken the countries' ability to cope with the immediate impact of the pandemic; they also delay the region's progress towards the SDG targets, which require a substantially higher level of spending than is currently available or projected in the near term (ESCWA and UNSDG, 2020). The fall in public revenues is also a challenge to any government's efforts in enacting bold social policy reforms and measures to reduce inequalities (Abdo and Almasri, 2020).

Fiscal revenues in the region are thought to have shrunk by nearly $40 billion in 2020, with losses in indirect taxes estimated at $20 billion, losses in import tariffs estimated at $5 billion and losses in other indirect taxes estimated at $15 billion (ESCWA and UNSDG, 2020). More recent estimates from IMF point to significant declines in general government revenues in the Arab region, which are projected to drop to 27.6 percent of GDP in 2020 from 31.8 percent of GDP in 2019 (**Figure 35**) (IMF, 2020b). On the other hand, IMF estimates that the fiscal cost of the socio-economic measures, which were implemented to mitigate the losses from the pandemic, average about 2 percent of the regional GDP. This is below the emerging market and developing economy's average of ~3 percent of GDP. The smaller size of fiscal relief packages is explained by the following factors: i) the limited fiscal space in some countries which prevents them from offering sizeable stimulus packages (even in some oil-exporting countries like Iraq) and ii) the pre-existing and relatively significant public economic support available in GCC countries (IMF, 2020b).

According to the IMF Regional Outlook published in October 2020, the overall fiscal balance in Arab countries is projected to deteriorate to -10.8 percent of GDP in 2020 from -3.3 percent of GDP in 2019 (2020b). The surging fiscal deficits will translate to higher financing needs in the region, with the median increase estimated at 4.3 percent of GDP (IMF, 2020b). These deficits and financing needs are likely to be funded by more borrowing. This will increase the debt burden in most Arab countries and pose additional challenges to some MICs (including Egypt, Lebanon, Morocco and Tunisia), which are accumulating fast-growing debt and are not eligible for any debt or debt service forgiveness programme. These countries were already spending heavily on debt service and interests before the pandemic (**Figure 36**). Data from ESCWA indicated an increase in the burden of external debt servicing as a share of GDP since 2015 in both MICs and LDCs. In 2018, the ratio stood at 3 percent of GDP in MICs and 1.5 percent of GDP in LDCs (2020h). Moreover, total debt service as a percentage of gross national income (GNI) stood at 36 percent in Lebanon, 8 percent in Jordan, 4 percent in Morocco and 3 percent in Egypt for 2019 (World Bank, 2019c).

Some countries are also resorting to IMF medium- and long-term lending mechanisms to meet emergency needs created by the pandemic. These countries will face higher debt service burdens in the next few years (**Figure 36** and **Table 25**) (ESCWA, 2020h). Abdo and Almasri (2020) also warn against fiscal consolidation measures that could follow this emergency loan funding: if countries adopt austerity policies following the crisis, they could witness increased inequalities, uprisings and conflicts.

The unprecedented economic losses caused by the pandemic and the tighter financing conditions could substantially impede efforts to invest in SDGs and limit the allocation of resources and spending that are necessary to achieve human development. The fiscal losses and lack of fiscal space to spend on social sectors and support are particularly problematic in Lebanon and Sudan, which were facing multilayered economic and political crises prior to the pandemic. There is a risk of higher social tensions in these two countries as citizens witness a deterioration in their living standards with no significant support from their governments to cope with these losses.
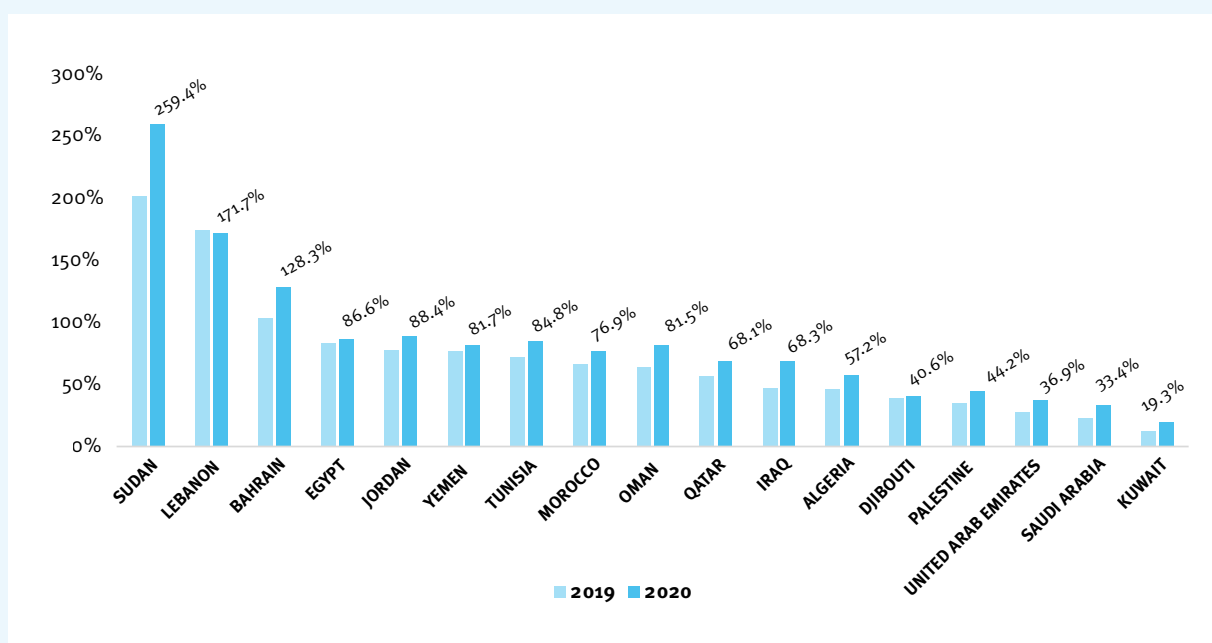
Figure 35. General government total revenue excluding grants in 2019 and projected for 2020 (% of GDP)
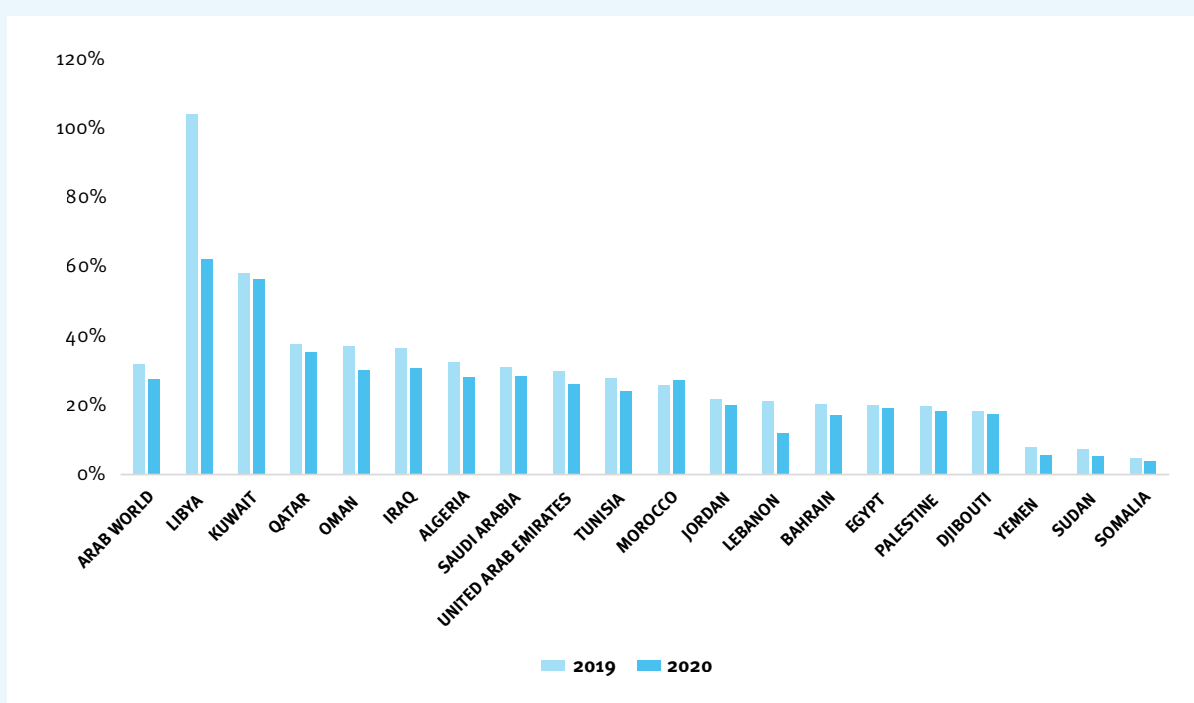
Source: IMF (2020b).
Note: Data for Syria are not available.

Figure 36. Estimated gross government debt, 2019 and 2020 (% of GDP)

Source: IMF (2020c).
Note: The percentages displayed are for 2020. Data for Libya, Somalia and Syria were missing.

Table 25. Medium-term debt burdens and gross financing needs in Arab oil-exporting and oil-importing countries, before and after COVID-19

	Medium-term debt burdens		Gross financing needs	
	Pre-COVID-19	Post-COVID-19	Pre-COVID-19	Post-COVID-19
Oil-exporting countries				
ALGERIA	Low risk	High risk	High risk	High risk
BAHRAIN	High risk	High risk	High risk	High risk
IRAQ	Low risk	High risk	High risk	High risk
KUWAIT	Low risk	High risk	Low risk	High risk
OMAN	High risk	High risk	Low risk	High risk
QATAR	Low risk	Low risk	Low risk	Low risk
SAUDI ARABIA	Low risk	Low risk	Low risk	Low risk
UAE	Lowrisk	Low risk	Low risk	Low risk
Oil-importing countries				
EGYPT	High risk	High risk	High risk	High risk
JORDAN	High risk	High risk	Low risk	High risk
MOROCCO	Low risk	High risk	Low risk	High risk
TUNISIA	High risk	High risk	Low risk	High risk

Source: IMF (2020b).
Note: Adapted from Figure 3.10. Data for the following countries were not included: Djibouti, Lebanon, Libya, Palestine, Somalia, Sudan, Syria and Yemen.

Cross-cutting case study: The multidimensional effects of the pandemic on adolescents and youth in the Arab region

Youth (11–29 years) make up the largest demographic group in the region. Even before the pandemic, this demographic was facing many challenges, including exclusion and discrimination at different levels. The year preceding the pandemic was marked by youth-led anti-government protests across the region in countries such as Algeria, Iraq, Lebanon and Sudan. Before COVID-19, youth faced difficulties in transitioning from education to employment and accessing economic opportunities and public services. Youth are particularly vulnerable to the devastating impacts of conflicts and economic crises in specific countries (ESCWA, 2020e).

COVID-19 and the lockdowns that were imposed to control the spread of the virus have had negative impacts on youth's education, livelihoods, employment opportunities and mental health in all Arab countries (**Table 26**, **Table 27** and **Table 28**). In this case study, data and trends were compiled from recent surveys to discuss the consequences of the pandemic on youth and how it has affected their perception of their future in the region.

Youth in the Arab region are facing a tougher reality due to COVID-19 and the lockdowns. A regional impact assessment conducted by ESCWA (2020e) highlights the following impacts of the pandemic and pandemic containment measures on youth.

Education

- Close to 100 million students were out of school in the Arab region when the first lockdowns were implemented in March 2020.

- Limited access to computers and technology, particularly in poor countries and vulnerable communities, did not allow for a smooth transition to digitalized education.

- Around 480,000 tertiary students studying abroad had to be repatriated and their return remained uncertain due to new waves of infections and prolonged lockdowns.

Livelihood and employment

- Millions of young Arabs could plunge deeper into poverty.

- Job losses and unemployment rates are expected to increase substantially due to the interruption and closure of businesses.

- The employed youth are mainly concentrated in the informal sector, which makes their situation even more precarious due to the lack of social and health insurance.

- Re-entering the job market after COVID-19 will be challenging, with the majority of the Arab youth who enter the informal sector lacking the skills required for the "new job market". This is particularly challenging for the youth who are NEET and for those who live in poor and marginalized areas. The skills required for the modern workplace, particularly after COVID-19, were lacking in the region before the pandemic. These skills include knowledge and skills in STEM disciplines, digital and programming skills, a high level of English proficiency and soft skills, including emotional intelligence and basic business etiquette to deal with conflicts and challenges (Jafar and Dakkak, 2020).

Mental health and well-being

- Lockdowns and mobility restrictions are having negative effects on the psychological well-being of youth in the Arab region. The closure of schools and interruption of recreational activities as well as the loss of livelihoods could result in mental health issues and may lead to life-threatening situations in the absence of support and counselling services.

- There are concerns about increased substance use, self-harm and mental health disorders among this segment of the population.

Table 26. The impact of government responses to the pandemic on adolescents in Gaza, Jordan and Lebanon: education and learning

A- Education and learning		
GAZA[48]	**JORDAN[49]**	**LEBANON[50]**
▪ Remote learning was not adequately planned and implemented at the school level, but was slightly more successful in universities. ▪ Girls, particularly older girls, felt that they had been very negatively affected by school closures. ▪ Adolescents were not satisfied with the alternative teaching methods in schools and universities and indicated that they have faced several challenges in accessing remote learning including power cuts, weak Internet connections and limited access to computers or mobiles.	▪ Limited access to or unavailability of devices (computers and TVs) and Internet connection in crowded households. Adolescents with disabilities have been particularly affected and have witnessed an interruption of their education. ▪ Inability to follow and understand the instructional materials. ▪ Limited support from teachers and parents.	▪ Some respondents stated not being able to learn and study remotely due to limited access to the Internet and devices. ▪ Some of the respondents who had access to distance learning indicated that they were not easily adapting to the new method of teaching and not understanding the instructional materials. ▪ Adolescent refugees fear not being able to return to school.

Sources: Hamad and others (2020), Youssef and others (2020) and Małachowska (2020).

[48] Forty-eight telephone interviews with vulnerable Palestinian adolescent boys and girls (11–19 years old), including married girls and adolescents with disabilities, conducted in April and May 2020. The sample comprised adolescents from the most vulnerable communities in the Gaza Strip, including vulnerable adolescents living in refugee camps, married adolescents or those at risk of early marriage, adolescents with disabilities, and in- and out-of-school youth or those at risk of dropping out.
[49] One-hundred phone interviews conducted in April 2020. The sample includes adolescents (15–19 years old) with hearing and visual disabilities, married girls, and out-of-school and working boys from refugee and Jordanian host communities.
[50] Sixty telephone interviews were conducted between April and May 2020. The sample includes adolescents from the most vulnerable communities in Lebanon, including vulnerable adolescents from the Lebanese host community, Syrian refugee adolescents living in both informal tented settlements and collective shelters from the Baalbek region, and Palestinian refugee adolescents living in Ein el-Hilweh refugee camp in the South Governorate. The sample consisted of married adolescents or those at risk of early marriage, and out-of-school adolescents or those at risk of dropping out.

Table 27. The impact of government responses to the pandemic on adolescents in Gaza, Jordan and Lebanon: livelihoods, poverty and access to health care

B- Livelihoods, poverty and access to health care [51]		
GAZA	**JORDAN**	**LEBANON**
▪ Several respondents expressed their concerns about the economic situation of their families and the job losses of their households' breadwinners. ▪ Many adolescents stated that their households were cutting their expenses and reducing their consumption of food. They also expressed their worries about basic necessities becoming unaffordable if the lockdown was extended (basic necessities include food, disinfectant or rent). ▪ Access to health care: responses were mixed; some reported that they were able to access health care services while others faced more challenges.	▪ Almost all respondents reported losses or a reduction in incomes. ▪ Adolescents mentioned that they had experienced food shortages and were consuming less food and fewer meals. ▪ Working boys lost their employment due to the lockdown and are concerned about their families' survival. ▪ Access to health care: married girls are concerned about pre-natal and maternity services during the lockdown.	▪ Most respondents reported that their household had reduced food consumption and stopped buying unaffordable food items. ▪ Respondents expressed their concerns about their futures in light of their decreased purchasing power as a result of the economic crisis.
[51] The interviews covered access to healthcare in Gaza and Jordan but not in Lebanon.		

Table 28. The impact of government responses to the pandemic on adolescents in Gaza, Jordan and Lebanon: psychosocial impacts

C- Psychosocial impacts		
GAZA	**JORDAN**	**LEBANON**
▪ Younger adolescents are more afraid or worried. Some girls reported carrying additional household burdens, resulting in more stress and anxiety. ▪ The respondents indicated that their interactions with their peers were reduced and boys reported facing limited mobility.	▪ The uncertainty of the situation is taking a toll on adolescents' mental health and well-being. ▪ Some respondents reported increasing tensions at home. ▪ Girls are shouldering the burden of additional care work at home.	▪ Respondents reported feelings of "distress, depression, anxiety and constant fear". ▪ The responses point to a material deterioration in youth's psychological well-being as a result of the pandemic and economic crisis. ▪ Adolescent girls indicated that their care work responsibilities within their households had increased due to the lockdown. The situation is particularly difficult for married girls who reported higher marital tensions from the worsening financial situation. ▪ Working boys (particularly Syrian boys) who are the major breadwinners in their households are anxious about the financial security and survival of their families.
*Source*s: Hamad and others (2020), Youssef and others (2020) and Małachowska (2020).		

The impact of COVID-19 on youth perceptions of the future of their region: potential youth emigration

According to the Arab Youth Survey,[52] two in five young Arabs (42 percent) had considered emigrating even before COVID-19, due to difficult economic conditions and widespread corruption in their country, with the highest rates recorded in Lebanon (77 percent), Libya (69 percent), Yemen (66 percent) and Iraq (65 percent) (ASDA'A BCW, 2020) (**Figure 37**).

Figure 37. Percentage of Arab youth who were actively trying to emigrate or had considered emigrating, before COVID-19, January–March 2020
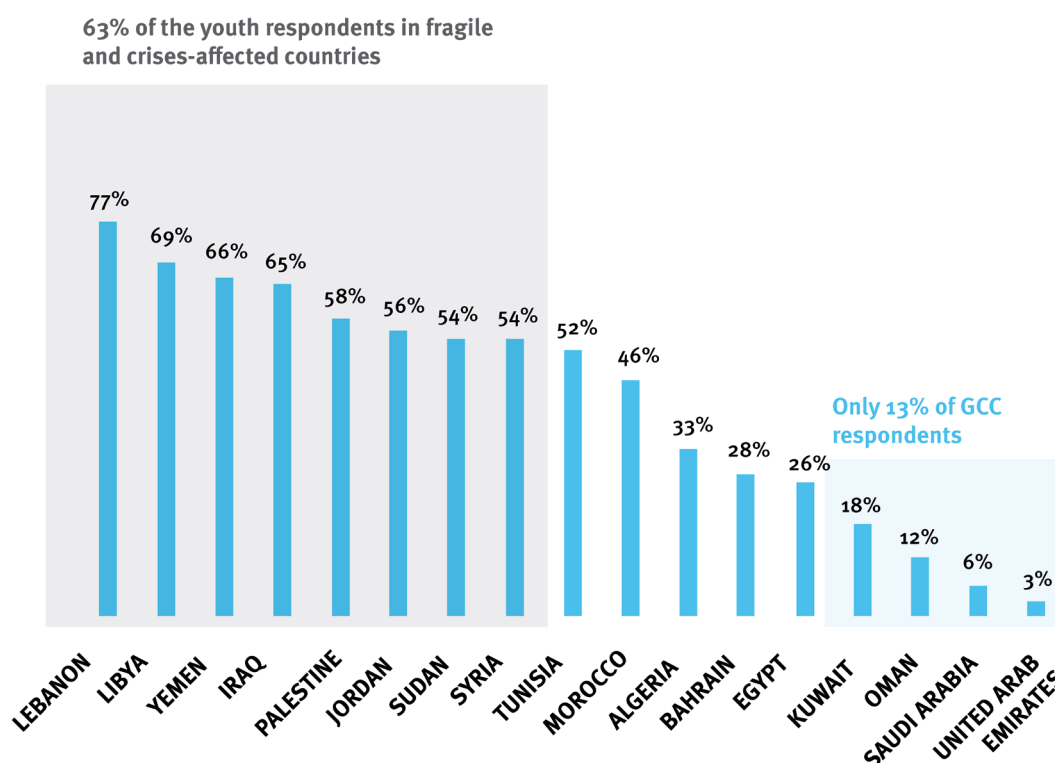
Source: ASDA'A BCW (2020).
Note: Djibouti, Qatar and Somalia were not covered by the survey.

The pandemic has made youth in the region more likely to consider leaving their country, with economic reasons cited as the main motivation. The findings of the Arab Youth COVID-19 Pulse Survey[53] – which was conducted in the peri-COVID-19 period – showed that the pandemic had made Arab youth more likely to want to emigrate or consider emigrating than before, particularly for Lebanese respondents. The rates are particularly substantial for Lebanon (77 percent) and Algeria (41 percent) and above the average reported across all MENA countries (ASDA'A BCW, 2020) (**Figure 38**).

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[52] The survey was conducted in 17 Arab States between 19 January and 3 March 2020, before the COVID-19 crisis. The sample consisted of 3,400 young national Arab men and women (50:50). Data was collected through face-to-face interviews.
[53] The COVID-19 Pulse Survey interviews were conducted between 18 and 26 August 2020, nearly six months after the completion of the main fieldwork of the 12th Annual Arab Youth Survey, to understand the impact of COVID-19 on Arab youth. The sample covered 600 young Arab nationals from six countries only: Lebanon, Algeria, Egypt, Jordan, Saudi Arabia and the UAE. Data was collected through face-to-face and online interviews.

Figure 38. Percentage of respondents indicating that they were more likely to emigrate after the pandemic, August 2020
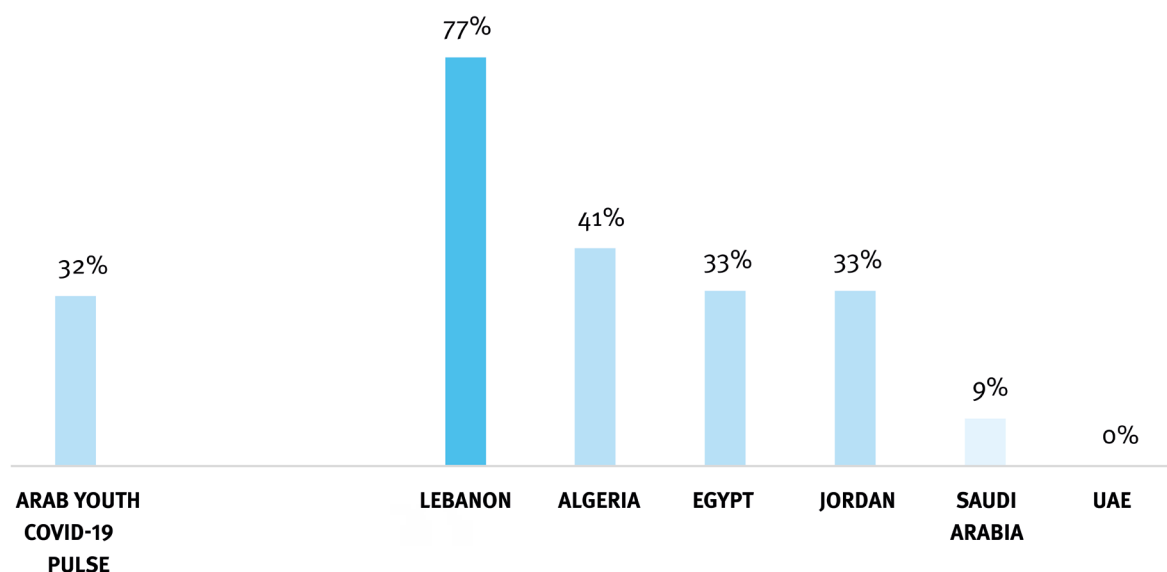
Source: ASDA'A BCW (2020).

Employment and labour market

The findings of the Arab Youth Survey show that the majority of youth were concerned about unemployment, with half of respondents "not confident" about their government's ability to fix this issue, even before the onset of the pandemic (ASDA'A BCW, 2020) (**Figure 39** and **Figure 40**).

Figure 39. Percentage of respondents who were concerned about unemployment pre-COVID-19, 2020

Source: ASDA'A BCW (2020).
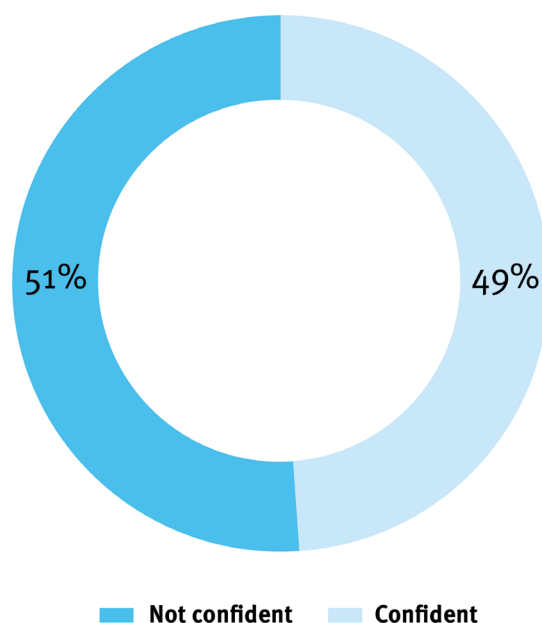
Source: ASDA'A BCW (2020).

Arab Youth COVID-19 Pulse Survey respondents reported that the labour market in their country had become even more difficult because of the pandemic, particularly in Lebanon (91 percent) and Jordan (90 percent) (ASDA'A BCW, 2020) (**Figure 41**).

Source: ASDA'A BCW (2020).

The findings of these surveys show that there is a risk of brain drain if the socio-economic situation further deteriorates across the region and youth decide to leave in search of better opportunities abroad. This will be more severe in countries that were battling with economic and political crises before the pandemic, and where youth have completely lost trust in their government's ability to implement reforms and create job opportunities. This potential new pandemic-driven wave of emigration would be another missed opportunity to boost productivity and build an innovative economic model that relies on the skills of an educated and talented workforce. Meanwhile, the lack of opportunities in traditional labour-recipient countries (namely the GCC) risks further exacerbating youth frustrations and heightening social tensions in their own countries.

Policy recommendations

Enhancing data systems and indicators

COVID-19 has highlighted the need for real-time data on key indicators to enable responsive policymaking that mitigates the impacts of the pandemic on human development losses, and ensures continued progress towards the SDGs. This report has identified various areas for improvement of data systems and indicators.

Early SDG warning systems: Use of rapid data-collection methods to provide nuanced data on key SDG indicators and their drivers is important to enable a tailored response to COVID-19 impacts and future emergencies. Data on rapidly changing proxies of SDG indicators, as well as on inputs and investments, that can drive progress and mitigate the negative impacts of COVID-19 on human development need to feed into these early warning systems; these indicators can also be used for multidimensional SDG modelling and forecasting (UNDP, 2020b). There are various examples of rapid surveys that were carried out to track and monitor key indicators in the region during the COVID-19 pandemic, including the rapid assessment of service delivery for NCDs during the COVID-19 pandemic (WHO Regional Office for the Eastern Mediterranean, 2020), the UNRWA COVID-19 Rapid Socio-economic Impact Survey (UNRWA, 2020), and the UN Women web-survey on the gendered impact of COVID-19 in nine countries in the region (UN Women, 2020b). Continued investment in rapid data-collection infrastructure is needed; this infrastructure will need to fill the data gap created by high reliance on telephone and web surveys which systematically exclude vulnerable populations that do not have access to these technologies.

Better data collection on existing indicators: Within the Arab region, there are a number of indicators that lack sufficient updated data. For example, there is inadequate coverage of indicator 1.4.2 on asset poverty, which is shown to be associated with food insecurity, and thus a critical marker of increased vulnerability. It is important to track inequalities in the Arab region, but current data-collection systems do not adequately disaggregate data to allow for the assessment of inequalities, nor do they capture the SDG 10 indicators.

Complementing SDG indicators: A number of dimensions were overlooked in the existing SDGs that have been identified as modes that impact human capabilities. For example, SDG 3 lacks indicators on stillbirth, and mental health, which has been greatly impacted by the pandemic and impedes resilience to shocks and future human capabilities. Several internationally validated tools exist to assess mental health through survey tools, including the simple five-question Mental Health Inventory-5 (MHI-5) which could be added to rapid surveys in the context of COVID-19.

Key investments for multisectoral progress

This report has highlighted the interlinkages and interdependencies between SDGs, and points to the need for a multisectoral approach that is able to trigger simultaneous progress across several SDGs. The following key investments have the potential to drive improvements in various human development goals.

Adopting interventions with cross-cutting impacts on SDG progress: Targeted investment in social protection policies, fiscal reform and bridging of the digital divide have the potential to impact multiple interlinked SDGs and trigger simultaneous progress in poverty and hunger reduction, and in improving access to universal health care and education (Abidoye and others, 2021).

Equitable and universal access to social protection: Social protection has excluded the most vulnerable, leaving those most in need of assistance at risk of vulnerabilities, including food insecurity and extreme poverty. Universal access to social protection, which is unlinked to formal employment, is vital for limiting shocks on the most vulnerable (migrant workers and those employed in the informal sector).

Fiscal policy reform: COVID-19 was a missed opportunity to implement radical fiscal reforms, but nevertheless provides an opportunity to evaluate and debate current policies. A number of changes in fiscal policy have previously been recommended and these include adopting policies that promote economic growth, expanding the fiscal space by raising revenues, and pursuing sustainable debt and budgetary investment in human capabilities and development (ESCWA, 2017). Fiscal policy reform is vital to the social investment and economic reforms required to attain the SDGs, so that the fiscal space can be expanded and debt or deficits developed during the pandemic alleviated (ESCWA, 2017).

Bridging the digital divide: Investments in infrastructure and resources to bridge the digital divide, and training and IT support for teachers and parents, are required to expand and enable access to remote learning for those who are excluded. Furthermore, regional investment in digital resources and training will have cross-sectoral impacts for access to health care and borderless employment and can go a long way towards reducing inequalities in access to information, education and potentially health care.

Balanced health care priorities: WHO recommends that task-shifting and task-sharing strategies be adopted to meet the increased demand of health care due to pandemic-related hospitalizations and to ensure universal access to essential services (WHO, 2007 and 2017). In Lebanon, for example, the transformation of empty annexes into COVID-19 units and the task shifting of non-ICU clinicians increased capacity to manage COVID-19 patients (UNHCR, 2021). In addition, 10 UNHCR-supported level 3 isolation facilities provided over 500 beds, which increased capacity in the event of a surge in COVID-19 cases. Preparedness is required for health systems to meet the demands of routine care as well as the health needs of future pandemics, and ensure universal health coverage.

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Appendix 1: Supplementary material for SDGs

Annex 1: Vulnerability of Arab countries to COVID-19-related supply and demand shocks

Country group	Supply shocks	Demand shocks
GCC countries (BAHRAIN, KUWAIT, OMAN, QATAR, SAUDI ARABIA, UAE)	Low exposure due to limited domestic agricultural production and exports: ■ Can shield food supply through reserves and trade	Low to intermediate-low exposure due to low share of food expenditure in total expenditures: ■ Shielding effect of high income per capita of GCC countries ■ Stabilizing effect of food subsidies
Maghreb countries (ALGERIA, LIBYA, MOROCCO, TUNISIA)	Variable exposure: ■ Algeria and Tunisia exposed to low risk with minimal exposure to risk from consumption of intermediate inputs and fixed capital and low agricultural exports ■ Morocco faces intermediate-high degree of exposure to risk due to labour-intensive production and risk associated with the availability of intermediate inputs	Variable exposure: ■ Algeria faces high degree of exposure to demand risk due to relatively high share of food expenditure and relative higher dependence on food imports ■ Morocco and Tunisia exposed to intermediate-low risk with relatively lower food import dependency
Mashreq countries (IRAQ, JORDAN, LEBANON, PALESTINE, SYRIA)	Variable exposure: ■ Jordan, Palestine and Syria subject to high exposure 　■ Syria due to conflict ■ Iraq and Lebanon face low to intermediate-low exposure 　■ Iraq due to limited agricultural exports	Intermediate-high to high exposure: ■ Iraq, Jordan and Palestine due to high share of imports ■ Syria due to conflict ■ Lebanon due to high share of imports and financial crisis
LICs (COMOROS, DJIBOUTI, MAURITANIA, SOMALIA, SUDAN, YEMEN)	Variable exposure: ■ Comoros, Djibouti and Mauritania subject to high exposure ■ Somalia, Sudan and Yemen subject to intermediate-low exposure 　■ Sudan and Somalia have relatively lower intensity of consumption of intermediate inputs and fixed capital	High exposure: ■ Possibly due to lack of sufficient social protection
EGYPT	Minimal exposure: ■ Successfully secured availability of food through imports, domestic production, food reserves of major staples and good winter harvest	Minimal exposure: ■ Due to high food import dependency, relatively high share of food expenditure ■ Government has taken mitigation measures

Source: Adapted from FAO (2020).
Acronyms: GCC = Gulf Cooperation Council; UAE = United Arab Emirates; LIC = low-income country.

Annex 2: Estimated increase in PoU according to FAO simulation of three hypothetical scenarios, 2020 (percentage points)

Country	PoU (2016/18)	Scenario 1: **Optimistic** (GDP growth -2)	Scenario 2: **Mild** (GDP growth -5)	Scenario 3: **Pessimistic** (GDP growth -10)
ALGERIA	2.3	2.4	2.5	2.6
DJIBOUTI*	15.3	15.8	16.6	18.0
EGYPT	2.3	2.3	2.4	2.5
IRAQ	24.2	24.4	24.8	25.5
JORDAN	8.0	8.2	8.5	9.0
LEBANON	8.1	8.3	8.6	9.0
LIBYA	1.3	1.3	1.4	1.5
MOROCCO	2.1	2.2	2.3	2.4
SOMALIA*	35.0	35.8	36.7	38.6
SUDAN	15.0	15.3	15.6	16.3
SYRIA*	3.8	4.0	4.3	4.9
TUNISIA	2.2	2.3	2.3	2.5
YEMEN*	33.5	34.3	35.6	37.8

Source: Conti, Cafiero and Sánchez (2020).
Acronym: GDP = gross domestic product.
Note: * = low-income food-deficit country (LIFDC).

The modelling study uses a generalized method of moments (GMM) estimator of the elasticity of food supply with respect to GDP growth. This is the percentage change in food supply (expressed in kilocalories per person per day) after a 1 percentage point change in annual GDP growth over the 1995–2017 period. Per capita food supply is predicted under three hypothetical scenarios: optimistic, mild and pessimistic, prospecting a reduction in GDP growth of, 2, 5 and 10 percentage points, respectively. These values are aligned with forecasts of GDP growth before and after the COVID-19 pandemic at the time of the study's publication.

Annex 3: Three modelling scenarios of component and coverage reductions for maternal and child care

	Workforce	Supplies	Demand	Access	Coverage (%)
Scenario 1 (optimistic)					
Family planning	None	Small	None	Small	9.8
Antenatal care	Small	Small	Small	Small	18.5
Childbirth care	Small	Small	None	Small	14.3
Postnatal care	Small	Small	Small	Small	18.5
Early child vaccinations	Small	Small	Small	Small	18.5
Early child preventive	None	Small	Small	Small	14.3
Early child curative	Small	Small	None	Small	14.3
Scenario 2 (mild)					
Family planning	Small	Moderate	None	Small	18.8
Antenatal care	Moderate	Moderate	Small	Small	26.9
Childbirth care	Moderate	Moderate	None	Small	23.1
Postnatal care	Moderate	Moderate	Small	Small	26.9
Early child vaccinations	Moderate	Moderate	Small	Small	26.9
Early child preventive	Small	Moderate	Small	Small	22.8
Early child curative	Moderate	Moderate	None	Small	23.1
Scenario 3 (pessimistic)					
Family planning	Moderate	Moderate	None	Large	39.3
Antenatal care	Large	Moderate	Small	Large	51.9
Childbirth care	Large	Moderate	None	Large	49.4
Postnatal care	Large	Moderate	Small	Large	51.9
Early child vaccinations	Large	Moderate	Small	Large	51.9
Early child preventive	Moderate	Moderate	Small	Large	42.3
Early child curative	Large	Moderate	None	Large	49.4

Source: Roberton and others (2020).
*Note*s: Small = 5 percent reduction; moderate = 10 percent reduction; large = 25 percent reduction. In addition to coverage reductions, the authors assumed that the proportions of children with wasting would be increased by 10 percent in Scenario 1, 20 percent in Scenario 2, and 50 percent in Scenario 3.

Appendix 2: Methodology

A desk review will inform the paper and is being completed to address the following objectives:

1) to develop a comprehensive conceptual framework to analyse the impact of the COVID-19 pandemic and containment measures on human development and human capabilities in the Arab region;

2) to use existing data and projections to map the impact of the pandemic on the SDGs and provide predictions on the implications of the pandemic on SDGs related to human development in the short and medium term;

a) to collate available data on key SDG indicators prior to the spread of the pandemic (December 2019) and track changes to date (post-March 2020).

Focus of the paper

This paper focused on the following SDGs: SDG 1 (poverty), SDG 2 (food insecurity), SDG 3 (health), SDG 4 (education) and SDG 10 (inequalities), both pre- and peri-COVID.

Review methods

Scoping searches have been completed on the grey literature to inform objective 1 (Search Strategy 1 and 2). These searches were completed in Scopus and/or Google Scholar to identify papers that have (Search Strategy 1) documented key frameworks that analyse the impact of shocks on human development (Search Strategy 3) and (Search Strategy 2) included SDG indicators during the pandemic (Search Strategy 4 and 5). During the data scoping exercise, two SDG tracking databases were explored and consulted (UNDP, 2020c and Luomi and others, 2019). After assessing data completeness and quality, data summarizing the performance of key indicators before the pandemic were downloaded and compiled from the Arab Sustainable Development Report (ASDR) (ESCWA, 2020b). The search strategies are shown in Appendix 3.

Published studies, pre-prints and grey literature were eligible for inclusion if they met the following criteria: (i) they included data or projections on the Arab region (ii) they presented data from March 2020 onwards and (iii) the data or projections were directly relevant to the SDGs (SDG 1, 2, 3, 4, 8 and 10) and their indicators. The inclusion and exclusion criteria for Search Strategy 2 is included in Appendix 3. Search 2 was completed in Scopus and Google Scholar, and results were limited to studies published since March 2020 and in English, Arabic or French.

Two reviewers have independently assessed the eligibility of studies based on the titles and abstracts. Disagreements were resolved by discussion and by a third reviewer if required. The full texts will be reviewed independently and included using the inclusion and exclusion criteria (Appendix 3). Included articles will be reviewed, and studies will be included in the narrative review if the data presented are relevant and appropriate to the conceptual framework. The narrative review is currently at the full text screening stage.

Data extraction

Data will be extracted from SDG reporting databases and statistics platforms, and triangulated with data extracted from the desk review. We will focus on a range of countries within the region to:

- **derive country or subregional case studies to analyse the impact of the pandemic on key SDG indicators, where possible using empirical data, or proxy indicators of intervention coverage to achieve the SDGs;**

- **draw lessons from the international literature on equity-focused policy entry points and their effectiveness in delivering improvements on key SDG indicators post-COVID;**

- **develop equity-focused policy recommendations to accordingly address the main human development issues identified in the Arab region.**

Appendix 3: Preliminary search strategies and data sources

Search Strategy 1: Data scoping

Initial data scoping was conducted from the following:

- **2019 Arab Region SDG Index and Dashboards Report**

- **SDG Tracker**

- **Eastern Mediterranean Region (EMR)-SDGs Learning Platform**

- **The Arab Development Portal.**

After assessing data completeness and quality, data summarizing the performance of key indicators before the pandemic were downloaded and compiled from the Arab Sustainable Development Report (ASDR) (United Nations Economic and Social Commission for Western Asia [ESCWA], 2020b).

Data will be extracted for a subset of SDG indicators for each Arab country including:

- **the unit and frequency of the indicator;**

- **the latest available data and the source and date of the last update;**

- **a breakdown and definition for each indicator.**

Search Strategy 2: COVID-19 and human development

Google searches were as follows:

- **COVID-19 human capital**

- **COVID-19 human development**

- **COVID-19 poverty**

- **Remittances COVID-19**

- **COVID-19 MENA**

- **COVID-19 developing economies**

- **Socio-economic impact of COVID-19 in the Arab world**

- **COVID-19 job losses**

- **IMF COVID-19 poverty**

- **Lockdown economic crises**

- **COVID-19 and conflict in the Middle East**

- **COVID-19 multiple crises**

- COVID-19 youth consequences

- COVID-19 Arab region

- Impact of COVID-19 on monetary metric poverty in Arab countries

- Dual shocks COVID-19

- ESCWA COVID-19 policy briefs

- UN COVID-19 socio-economic assessment

- COVID-19 UNDP Arab States.

Keywords used to find dashboards and platforms tracking SDG achievement and performance in Arab countries were as follows:

- SDG Arab world

- SDG Tracker in the Arab world

- SDG Trackers.

Search Strategy 3: Conceptual frameworks

Key search terms: Sustainable development goals * livelihood * human development * human capital * COVID-19 * shock * crisis * resilience * pandemic * multidimensional poverty * theory * framework

Google searches were as follows:

- Sustainable Development Goals AND livelihood (theor* OR framework)

- Sustainable Development Goals AND human development (theor* OR framework)

- Sustainable Development Goals AND COVID-19

- Human capital AND COVID-19

- Sustainable Development Goals AND (shock OR crisis)

- Human capital AND (shock OR crisis)

- COVID-19 AND livelihood (theor* OR framework)

- Sustainable Development Goals AND multi-dimensional poverty

- COVID-19 AND multi-dimensional poverty

- Sustainable Development Goals AND multi-dimensional poverty AND COVID-19

- Resilience AND (framework OR theor* OR measur*)

- Resilience AND (shock OR crisis OR COVID-19)

- Resilience AND (shock OR crisis OR COVID-19) AND (framework OR theor* OR measure*)

- Resilience AND (pandemic OR epidemic)

- Resilience AND (pandemic OR epidemic) AND (framework OR theor* OR measure*)

- Sustainable Development Goals AND resilience

- Resilience AND human development

- Resilience AND multi-dimensional poverty

Search Strategy 4: Scopus search for peri-COVID data

(((((TITLE-ABS-KEY ("Sustainable Development Goal 1" OR "SDG 1" OR poverty OR socio-economic OR income OR "social protection"))) OR ((TITLE-ABS-KEY ("Sustainable Development Goal 2" OR "SDG 2" OR hunger OR "food security" OR "food insecurity" OR "nutrition" OR "malnutrition" OR "underweight" OR "overweight" OR "stunting" OR "wasting" OR nourish* OR agricultur* OR ("access" W/3 "food")))) OR ((TITLE-ABS-KEY ("Sustainable Development Goal 3" OR "SDG 3" OR "health" OR "well?being" OR "mortality" OR "disease" OR "universal health coverage" OR (("essential" OR "basic" OR "access") W/3 ("health?care" OR "medicine" OR "medication" OR "vaccin*"))))) OR ((TITLE-ABS-KEY ("Sustainable Development Goal 4" OR "SDG 4" OR (("quality" OR "equit*" OR "equal*" OR "access*" OR "affordab*") W/3 ("educat*" OR "learn*" OR "primary education" OR "primary school" OR "secondary education" OR "secondary school" OR "tertiary education" OR "university")) OR (("vulnerable" OR "disability" OR "disabled") W/3 ("educat*"))))) OR ((TITLE-ABS-KEY ("Sustainable Development Goal 8" OR "SDG 8" OR ("econom*" W/3 "growth") OR ("gross domestic product" OR "GDP") OR "decent job" OR "decent work" OR "decent labo?r" OR "job creation" OR "informal employment" OR (("equal*") W/3 ("pay*" OR "work*")) OR ("wage" W/3 ("gap" OR "diff*")) OR ("unemployment" W/3 ("sex" OR "gender" OR "disability" OR "age")) OR (("youth" OR "young") W/3 ("employ*" OR unemploy*)) OR "forced labo?r" OR "modern slavery" OR "human traffick*" OR "child labo?r" OR "child slave*" OR "child traffick*" OR "child* work*"))) OR ((TITLE-ABS-KEY ("Sustainable Development Goal 10" OR "SDG 10" OR (("income") W/3 ("equal*" OR "inequal*" OR "distribution") W/3 ("poor" OR "disadvantaged" OR "marginalized" OR "vulnerab*")))))) AND ((TITLE-ABS-KEY (("middle" W/2 "east*") OR ("north*" W/2 "africa*") OR ("east*" W/2 "Mediterranean") OR "Lebanon" OR "Algeria*" OR "Bahrain*" OR "Egypt*" OR "Iraq*" OR "Jordan*" OR "Kuwait*" OR "Comoros*" OR "Yemen*" OR "Emirat*" OR "Libya*" OR "Morocc*" OR "Oman*" OR "Palestin*" OR "Gaza" OR ("West*" W/2 "Bank") OR "Qatar*" OR "Saudi*" OR "Syria*" OR "Tunis*" OR "Sudan*" OR "Djibouti" OR "Somali*" OR "Mauritania*" OR "Levant" OR "MENA" OR "EMRO" OR "Orient" OR "Arab*"))) AND ((TITLE-ABS-KEY ("nCoV" OR "COVID19" OR "COVID-19" OR "coronavirus"))) AND ((TITLE-ABS-KEY ("progress" OR "projection*" OR "estimate*" OR "predict*" OR "effect" OR "impact"))) AND (LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020))

Date of Scopus Search: Friday 2 October 2020

Search Strategy 5: Google scholar search for peri-COVID data

Used Keywords	Search results + notes
("Sustainable Development Goals" | "SDG")	Date of search: 04/10/2020
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("COVID-19" | "coronavirus")	Date of search: 04/10/2020
AND	
"Sustainable Development Goals"	
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("SDG 1" | "No poverty")	Date of search: 05/10/2020
AND	

("COVID-19" |"coronavirus")	
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("SDG 2" | "ZERO Hunger")	Date of search: 06/10/2020
AND	
(COVID-19 |"coronavirus")	
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("SDG 3" | "Good health and well-being")	Date of search: 06/10/2020
AND	
(COVID-19 |"coronavirus")	
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("SDG 4" | "Quality education")	Date of search: 06/10/2020 and 07/10/2020
AND	
(COVID-19 |"coronavirus")	
AND	
(Lebanon|Egypt|Libya|Morocco|Tunisia|Sudan|Bahrain|Iraq|Jordan|Kuwait|Qatar|Saudi Arabia|Oman|Syria|Emirates|Palestine|Algeria|Yemen|MENA|Arab|Middle East) ("SDG 8" | "Decent work and economic growth")	Date of search: 07/10/2020
AND	
("COVID-19" |"coronavirus")	
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen) ("SDG 10" | "Reduce inequalities")	Since 2020
AND	Included results: 5
("COVID-19" |"coronavirus")	Date of search: 07/10/2020
AND	
(Algeria|Arab|Bahrain|Egypt|Emirates|Iraq|Jordan|Kuwait|Lebanon|Libya|MENA|Middle East|Morocco|Oman|Palestine|Qatar|Saudi Arabia|Sudan|Syria|Tunisia|Yemen)	

Appendix 4: Inclusion criteria for Search Strategy 4 and 5

To be included in the study, a paper or report must meet the following criteria:

(1) it is relevant or related to an SDG;

(2) it is based on the Arab region;

(3) it provides SDG-related data, insights or projections post-March 2020.

Table 29. Study inclusion criteria

Population: geographic focus only	Based on one or more of the 22 countries in the League of Arab States or Arab region, Eastern Mediterranean Region (EMR), Middle East and North Africa (MENA) or Gulf Cooperation Council (GCC)
Intervention	COVID-19
Outcome	Any data, insights, or projections related to SDGs 1–4, 8 and 10 (**Table 31**).
Study design	Observational data or predictive analytics

Table 30. Report inclusion criteria

Language	English, French and Arabic
Type of publication	Peer review, reports and pre-prints.
Publication date	March 2020 onwards

Table 31. Included SDGs

SDG 1	End poverty in all its forms everywhere.
SDG 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
SDG 3	Ensure healthy lives and promote well-being for all at all ages.
SDG 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
SDG 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
SDG 10	Reduce inequality within and among countries.

Article inclusion criteria

Articles that met the following criteria were included:

1. Systematic reviews that include studies on COVID-19 in a country of interest.

2. Data showing the effect of the epidemic on the health of specific subpopulations of both the epidemic and infodemic, if accompanied by quantitative projections of increased morbidity and mortality. Descriptions of the pathophysiology are insufficient for inclusion; the article must also analyse:

    - **Demographic groups: children, pregnant women, occupational groups (including healthcare workers)**

    - **Diagnostic groups: cardiology, diabetes, inflammatory bowel disease, mental health, neurosurgery, oncology, renal transplant, rheumatology**

3. Impacts on health access and hard health outcomes (e.g. telemedicine, death, cardiovascular disease, mental health).

4. Effects on educational activities, including the transition to e-learning.

5. Effects on institutions and economic activities of both the epidemic and infodemic.

6. Geographic differences in climate on disease rates, with resulting differential impacts on populations.

7. Impact of lockdown measures on health, economy, food security and equity.