



# Arab food security monitoring framework

## Country reviews

### Egypt



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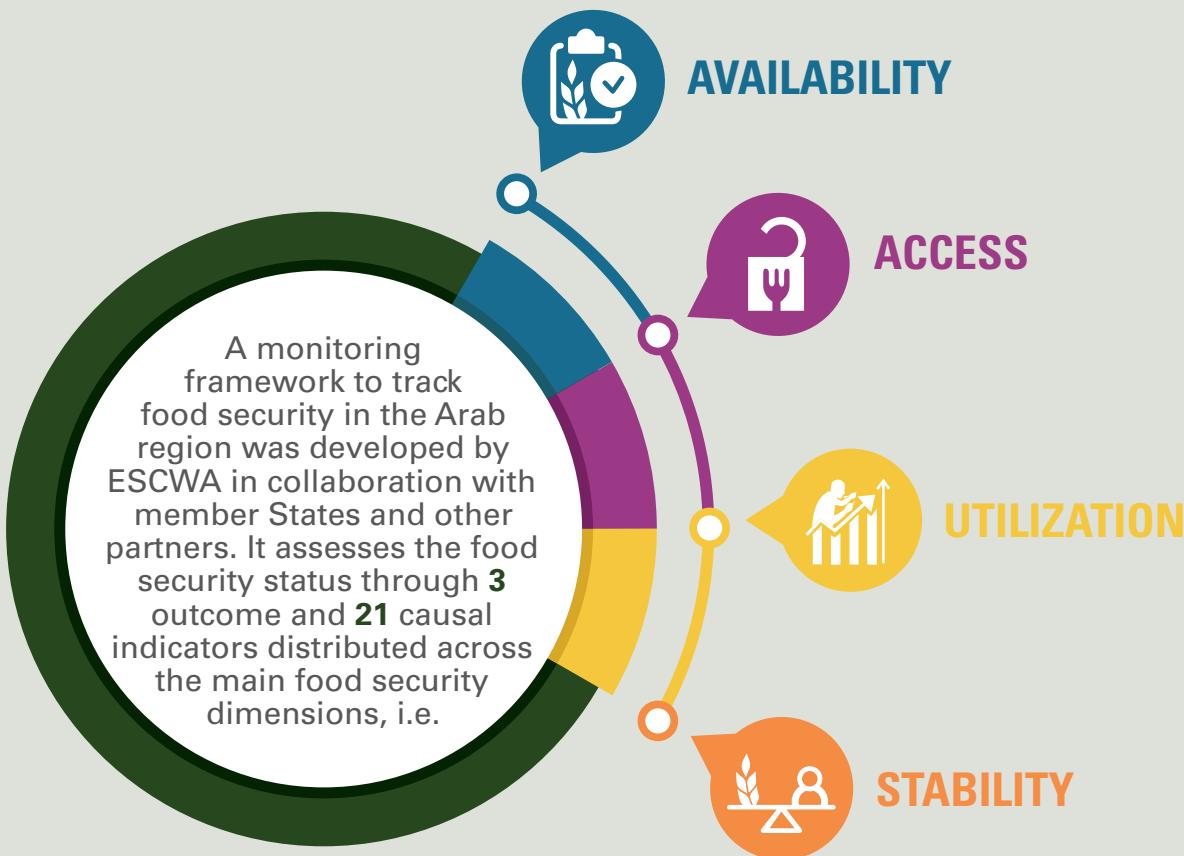
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## Key Messages



The monitoring framework highlights that obesity rates are elevated in Egypt, as are rates of child stunting and wasting as well as anaemia among women. The country is a major wheat producer but also a large importer, which could jeopardize its food security. The country profile reviews the impact of COVID-19, early measures against it and their effect on the food situation.



**CHILD STUNTING**



**CHILD WASTING**



**ANAEMIA**



# Introduction

The United Nations Economic and Social Commission for Western Asia (ESCWA) and its partners developed the Arab Food Security Monitoring Framework that helps countries assess their food security situation despite its complex and multidimensional nature.<sup>1</sup> The Monitoring Framework is an outcome of the project entitled “Promoting Food and Water Security through Cooperation and Capacity Development in the Arab Region” implemented in collaboration and partnership with Arab countries, the Arab Organization for Agricultural Development (AOAD), the Food and Agriculture Organization (FAO), academia and other experts, and with the support of the Swedish International Development Cooperation Agency (Sida).

The framework builds on the globally agreed upon definition of food security as existing “when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”<sup>2</sup> which, as defined, comprises four dimensions, namely availability, access, utilization, and stability, can be evaluated at individual, household, national, regional, or global levels and can be seasonal, transitory or chronic. The framework was developed over a period of three years and involved consultations with more than 200 Arab and international experts. It involved a wide-ranging literature review to account for the latest thinking and experiences in assessing and monitoring food security at national, regional and global levels as well as a mapping of past and present policies, strategies and action plans.

The encompassing review led to the development of a comprehensive monitoring framework that tracks food security at different spatial levels, considers its four dimensions and accounts for both individual and household food security while facilitating a follow-up of the implementation of the Sustainable Development Goals (SDGs). The end result was the Monitoring Framework that expresses food security and nutrition as a function of a multitude of indicators spread in its four dimensions, though approximately five to six indicators under each dimension account for most of the variations and thus are more consequential than the rest. Most of the selected indicators are already widely used globally to monitor aspects of the food system, and the SDGs and other plans of actions are used by major global institutions as development, economic, social, health, or environmental indicators. It was also ensured that the indicators are measurable, relevant to the Arab context and available for at least 50 per cent of Arab countries or the regional population, or both.

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<sup>1</sup> Economic and Social Commission for Western Asia (ESCWA), 2019. Tracking Food Security in the Arab Region (E/ESCWA/SDPD/2019/4). Beirut. Available at <https://www.unescwa.org/publications/tracking-food-security-arab-region>.

<sup>2</sup> Food and Agricultural Organization (FAO), 2009. Report of the Committee on World Food Security: Final version. Agenda item III, Thirty-fifth Session of the Committee on World Food Security, 14, 15 and 17 October 2009, CFS:2009/2 Rev.2. Rome.



The 24 indicators that were selected are split into a core pillar with three ex post or outcome indicators — prevalence of undernourishment, moderate or severe food insecurity and obesity, while the remaining 21 ex ante or causal indicators were further split into the four food security dimensions as shown below. All the indicators are global in nature while catering to regional specificities and are grouped as follows:

- **The Core Pillar** comprises three outcome indicators that provide a picture of the prevailing food security and nutrition situation resulting from policies and programmes being implemented as reflected in the form of malnutrition – undernutrition (low caloric intake), overnutrition (excess caloric intake) or nutrient deficiency (low nutrient intake);

<b>1 Core Indicators (CO)</b>			
<b>Code</b>	<b>Indicator description</b>	<b>Short name</b>	<b>SDG linkage</b>
<b>CO1</b>	Prevalence of undernourishment <b>R %</b>	Undernourishment	2.1.1
<b>CO2</b>	Prevalence of moderate or severe food insecurity measured using FIES <b>R %</b>	Food insecurity	2.1.2
<b>CO3</b>	Prevalence of obesity in the adult population (18 years and older) <b>R %</b>	Obesity	

**R** : Reversed During Normalization

- **The Availability dimension** comprises six indicators reflecting the supply side of food, namely, physical food inflow and outflow at macro and micro levels through production, trade, distribution, and others;

<b>2 Food Availability Indicators (AV)</b>			
<b>Code</b>	<b>Indicator description</b>	<b>Short name</b>	<b>SDG linkage</b>
<b>AV1</b>	Primary wheat yield as a percentage of potential achievable yield - %	Yields	2.3.1
<b>AV2</b>	Agriculture Orientation index for government expenditures - Index	Agriculture expenditure	2.a.1
<b>AV3</b>	Food losses (% total food available) <b>R %</b>	Food loss	12.3
<b>AV4</b>	Average dietary energy supply adequacy - %	Dietary energy supply	
<b>AV5</b>	Wheat import dependency ratio <b>R %</b>	Import dependency	
<b>AV6</b>	Share of water resources used in agriculture out of total renewable water resources <b>R %</b>	Agriculture water	6.4.2



- The Access dimension comprises five indicators reflecting the ability of the population to acquire needed food through financial means and/or socioeconomic strengths with determinants including income/revenues, prices and supply-chain infrastructure;

3 Food Access Indicators (AC)			
Code	Indicator description	Short name	SDG linkage
AC1	Poverty headcount ratio  %	Poverty	1.1.1/1.2.1/1.2.2
AC2	Share of food consumption expenditure in total household consumption expenditure  %	Food consumption	
AC3	Unemployment rate  %	Unemployment	8.5.2
AC4	Logistics performance - index	Logistics	
AC5	Inflation, consumer prices  %	Inflation	

- The Utilization dimension comprises five indicators touching on nutrition impact or factors affecting it such as availability of basic water and sanitation infrastructure and critical health parameters showing the impact of food unavailability or nutrient deficiency, namely, stunting, wasting and anaemia;

4 Food Utilization Indicators (UT)			
Code	Indicator description	Short name	SDG linkage
UT1	The population using at least basic drinking water services - %	Drinking water access	1.4.1/6.1.1
UT2	The population using at least basic sanitation services - %	Sanitation access	1.4.1/6.2.1
UT3	Children under 5 years of age affected by stunting  %	Child stunting	2.2.1
UT4	Children under 5 years of age affected by wasting  %	Child wasting	2.2.2
UT5	Anaemia among women of reproductive age (15-49 years)  %	Women anaemia	

- The Stability dimension comprises five indicators highlighting the variability in food production or supply factors that might affect these such as climate change, weather events, price shocks and sociopolitical conditions, all of which might impact the other food security dimensions and the core pillar as well;

5 Stability Indicators (ST)			
Code	Indicator description	Short name	SDG linkage
ST1	Climate change vulnerability index	Climate change	
ST2	Food price anomalies standard deviation	Price anomalies	2.c.1
ST3	Political stability and absence of violence - ranking	Political stability	
ST4	Per capita food production variability - \$1,000/capita	Production variability	
ST5	Per capita food supply variability - kcal/capita/day	Supply variability	



Data are collected and computed using a dedicated Excel template. The results are presented in the form of a dashboard with two overlapping doughnut charts whose ten rings represent the data normalized to score between 0 (worst performance) and 10 (best performance), as depicted in the graph below. The inner doughnut displays the results of the core indicators while the outer doughnut shows those of the four food security dimension indicators. During the normalization process, indicators with a low value indicating good performance were reversed and are represented with an (R). The doughnut chart is always accompanied by a table presenting the raw indicator data together with the year of data collection and the overall trend between two time periods.

By design, the framework is mechanistic for two reasons: (i) indicators are set and distributed across the food security core pillar and four dimensions; and (ii) the interpretation of results follows a determined path consisting, first, in evaluating results of the three core indicators to identify food security and/or nutritional outcome, and second, in examining the 21 dimension indicators to identify hotspot areas that need immediate action. Stakeholders only need to enter data into the provided Excel template to generate the doughnut graph and related table containing raw data and trends. The data can be sourced at the regional, national and, if available, sub-national levels and disaggregated along gender lines or others noting, however, that a great majority of indicators cannot be disaggregated below the national level.

A complete description of the framework, which was endorsed by the Executive Council of AOAD in March 2019, was published and is available at ESCWA official publication website<sup>3</sup> under the title “Tracking Food Security in the Arab Region”<sup>4</sup>. In addition to providing a full background on the framework, the publication presents the key results of tracking food security at the Arab regional level and the trend over the considered years and reviews selected policies and actions that might be considered under each of the indicators to remedy arising concerns. The publication is accompanied by a technical document entitled “Manual for Monitoring Food Security in the Arab Region”, which provides a more detailed description for each of the 24 indicators comprising the monitoring framework including, when applicable, computation methodology, justification for selection, linkage to SDGs, potential data sources, and normalization process. It also overviews the use of the accompanying Excel template. Since the completion of the Food Security Monitoring Framework, numerous national agricultural and statistics experts from Arab countries have received in-depth training that took place in Tunis<sup>5</sup> and Beirut<sup>6</sup> and which focused on how to utilize the framework and interpret results for maximum impact for policy and programme design and development.

This report provides a series of food security overviews for the 22 Arab countries, which build on the above-described Arab Food Security Monitoring Framework. Its aim is to further highlight how to use the framework as well as to build capacity on its use with a focus on the national level. As such, it supports Arab countries in their endeavours to utilize the framework in the implementation of food security programmes, to assess the prevailing situation and

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3 See [https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/tracking-food-security-arab-region-english\\_1.pdf](https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/tracking-food-security-arab-region-english_1.pdf).

4 See [https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/manual-monitoring-food-security-arab-region-english\\_1.pdf](https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/manual-monitoring-food-security-arab-region-english_1.pdf).

5 See <https://www.unescwa.org/events/training1-food-security-monitoring-framework-arab>.

6 See <https://www.unescwa.org/events/training2-food-security-monitoring-framework-arab>.



to follow up on progress achieved towards the implementation of selected SDGs. It should further enhance capacity at country level and support efforts of national experts to collect focused data, analyse them using a dedicated framework and interpret meaningfully the results to provide policymakers with an overall view of their respective country's food security situation while also outlining alternative paths to address the situation.

The country overviews were produced by ESCWA with data delivered by national experts who provided or reviewed the underlying data (see attached list) and from global databases, as appropriate. For some countries, critical data are still missing, which should serve as a call to action to collect and provide the necessary data as the basis of more accurate and focused advice. The data were collected prior to the COVID-19 pandemic; thus, some results might not reflect the current situation. It is hoped that the report will raise the necessary awareness so that countries can make additional efforts to remediate the lack of data.



## Food security dashboard



## Food security indicators, world vs. Arab region

Indicators		World		Arab region			Trend
		Latest	2010	Latest	Year		
Code	Description	Value	Year	Value	Value	Year	
<strong>CORE INDICATORS</strong>							
CO1	Undernourishment  %	10.8	2016	11.5	12.1	2016	
CO2	Food insecurity  %	9.2	2018	n.a.	12.2	2016	
CO3	Obesity  %	13.0	2016	24.6	28.4	2016	
<strong>AVAILABILITY INDICATORS</strong>							
AV1	Wheat yields - %	n.a.		76.5	82.2	2017	
AV2	Agriculture expenditure - index	n.a.		n.a.	n.a.		
AV3	Food loss  %	n.a.		7.3	6.8	2013	
AV4	Dietary energy supply - %	n.a.		131	131	2017	
AV5	Wheat Import dependency  %	n.a.		62.5	65.0	2012	
AV6	Agriculture water  %	n.a.		n.a.	n.a.		
<strong>ACCESS INDICATORS</strong>							
AC1	Poverty  %	26.2	2015	n.a.	16.6	mult.	
AC2	Food consumption  %	n.a.		n.a.	n.a.		
AC3	Unemployment  %	5.0	2018	9.6	10.4	mult.	
AC4	Logistics - index	2.8	2016	2.6	2.7	2016	
AC5	Inflation  %	2.5	2018	5.7	12.8	mult.	
<strong>UTILIZATION INDICATORS</strong>							
UT1	Drinking water access - %	88.5	2015	84.3	86.9	2015	
UT2	Sanitation access - %	68.0	2015	78.9	80.8	2015	
UT3	Child stunting  %	22.2	2017	n.a.	22.9	mult.	
UT4	Child wasting  %	7.5	2017	n.a.	8.7	mult.	
UT5	Women anaemia  %	32.8	2016	34.2	35.5	2016	
<strong>STABILITY INDICATORS</strong>							
ST1	Climate change  - index	n.a.		n.a.	0.1	2019	
ST2	Price Anomalies  - index	n.a.		n.a.	n.a.		
ST3	Political stability - ranking	n.a.		20	14	2017	
ST4	Production variability  - \$1,000/capita	n.a.		10.3	10.1	2016	
ST5	Supply variability  - kcal/cap/day	n.a.		32.8	29.8	2013	

: Reversed During Normalization

n.a.= Not Available

mult.= Multiple years

Red: Negative Trend

Yellow: Neutral Trend

Green: Positive Trend

Source: Computed by ESCWA.





# Country background

## A. Natural resources

The main characteristic of Egypt is the dominance of the Nile River, which provides most of the water resources of the country and is used for irrigation. In its upper part, the river runs through a narrow valley while the lower part opens into a fertile delta all the way to the Mediterranean Sea. The coastal

regions with limited fertility and rainfall are sparsely populated though they offer opportunities for developing resorts. In about one third of the country, the Nile runs over Nubian sandstone which allows for some agricultural activities in few oases.<sup>1</sup>

### Box 1. The role of Egypt's social protection system in food security

Food subsidies, especially on bread, have long been the backbone of Egypt's social protection system, which amounted to up to 9.7 per cent of GDP in 2015/2016. However, the country has a high prevalence of child undernutrition and, at the same time, an increasingly high prevalence of obesity notably among children and women, a further indication that the food subsidy programme might be ineffective in improving the nutritional status of the population. Egypt is also experiencing a shift in dietary patterns as a result of the growing affluence while the current design of the food subsidy system might diminish the ability of Egyptians to adapt their diets as the system facilitates access to high-energy yet low-micronutrient content.<sup>a</sup>

Under pressure from donors and lenders, these subsidies are being transformed into more targeted programmes such as direct cash transfers to the most vulnerable.<sup>b</sup> The target population consists of some 2.1 million households including pregnant and lactating women, families with children under 18, elderly and people with disabilities. School meal programmes are among other social safety net initiatives which intend to cover 12 million school children. Today, 80 per cent of the population receives food subsidies in one form or another including through a subsidy card programme that provides bread at less than one tenth of the cost and allows beneficiaries to replace bread with a selection from 44 other designated food products.<sup>c</sup>

<sup>a</sup> Ecker, O. and others, 2016.

<sup>b</sup> World Food Programme (WFP), 2018.

<sup>c</sup> FAO Global Information and Early Warning System (GIEWS), 2019.

<sup>1</sup> Goldschmidt, A. E. and others, 2019.





## B. Socioeconomy

With a population of 102 million, Egypt is the Arab region's most populated country. In 2018, its gross domestic product (GDP) was some \$250 billion, with a per capita income of \$2,573.<sup>2</sup> Poverty and inequality are the two main challenges impeding the country's achievement of food and nutrition security.<sup>3</sup>

Due to its high dependence on global food markets, the country's poor are particularly

vulnerable to food-price fluctuations, especially after the flotation of the Egyptian pound in 2016. Moreover, Egypt has received up to 200,000 migrants and refugees from the Syrian Arab Republic and elsewhere since 2011. They mostly live in overcrowded urban settlements, and a 2016 survey indicated that only 38 per cent, predominantly men, were economically active.<sup>4</sup>

## C. Agriculture and food security

Agriculture is a significant contributor to the economy, as, in 2017, it accounted for 14.5 per cent of GDP, 28 per cent of all jobs and nearly half of women's employment.<sup>5</sup> Yet, Egypt is also the largest wheat importer in the world as it imports approximately 50 per cent of its needs.<sup>6</sup>

Farming largely takes place in the narrow strip encasing the river Nile and the rich delta. Small farmers dominate the sector and

face an increasingly burdensome livelihood. The agricultural area is only 3.7 per cent of the country's total area, and Egypt has one of the lowest ratios of arable land per capita in the world. The recent discovery of natural gas may alleviate some of the country's vulnerability and facilitate the implementation of its development strategy including the financing of the planned reclamation of 2 million hectares of desert land.

2 International Monetary Fund (IMF), 2019.

3 World Food Programme (WFP), 2018.

4 Ibid.

5 USAID, 2017.

6 FAO Global Information and Early Warning System (GIEWS), 2019.





# Data and trends

## A. Core indicators

- **Prevalence of undernourishment (CO1)** is generally low even though it slightly increased from 4.5 to 4.8 per cent between in 2010 and 2016, which is well below the Arab average of 12.1 per cent of 2016. The good social safety net programme could be a reason for these low figures despite the high rate of poverty;
- **Prevalence of severe food insecurity (CO2)** had a prevalence rate of 10.1 per cent for 2016 (2015-2017), which is slightly lower than the Arab regional average of 12.2 per cent (estimated by the authors). The high poverty and unemployment rates might explain the feeling of food insecurity by a portion of the population;
- **Prevalence of adult obesity (CO3)** in the adult population increased between 2010 and 2016 from 28 per cent to 32 per cent, which is higher than the Arab average of 28.4 per cent of 2016. Adult obesity is more prevalent among women (41.1 per cent) than men (22.7 per cent) and might be due to a nutritional transition away from traditional diets.

## B. Availability

- **Wheat yield to potential (AV1)** are among the highest in the world, with yields of 5.6 tons/ha in 2010 and 6.5 tons/ha in 2017, which are well in excess of potentially achievable yields of 4.65 tons/ha.<sup>7</sup> Wheat production is almost completely irrigated which might explain the high yields;
- **Agriculture orientation index (AV2)** decreased slightly from 0.14 in 2010 to 0.12 in 2017, indicating a lesser inclination of the Government budget towards agriculture. It should be noted, however, that this does not necessarily imply less funding to the sector;
- **Food losses to food available (AV3)** decreased slightly between 2010 (9.9 per cent) and 2013 (9.8 per cent). It should be noted, however, that data are not complete and food waste is not accounted for. For example, losses through traditional wheat storage can be as high as 10-20 per cent and up to 50 per cent for fruit and vegetables;<sup>8</sup>

<sup>7</sup> Mueller, N.D. and others, 2012.

<sup>8</sup> Food and Agriculture Organization (FAO), 2019; and WFP, 2018.



- **Average dietary energy supply adequacy (AV4)** increased from 149 per cent in 2010 to 153 per cent in 2017, indicating a favourable trend in food availability. It is noteworthy that both these values are among the highest in the world;
- **Wheat import dependency (AV5)** decreased slightly from 43.9 per cent in 2010 to 42.1 per cent in 2012. Wheat import dependency increased to 56 per cent in 2017<sup>9</sup> as Egypt has become one of the world's largest importers of wheat due to its growing population but also the food subsidy programme, which greatly favours bread consumption;
- **Water resources used in agriculture (AV6)** stood at 76.7 per cent in 2017. The agriculture sector of Egypt is heavily dependent on irrigation. However, water use efficiency needs to be further improved. Water use in agriculture could further increase as the country moves forward with its plan to reclaim desert land as part of its Vision 2030.

## C. Access

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- **Poverty ratio at \$3.2/day (AC1)** decreased significantly from 21.4 per cent in 2010 to 16.1 per cent in 2015, which is slightly below the regional average of 16.6 per cent. There are disparities in poverty along geographic and gender lines, with women, rural people and the urban poor being the most vulnerable;<sup>10</sup> estimated that approximately 28 per cent of the Egyptian labour force was employed in the agricultural sector;
- **Food consumption share of expenditures (AC2)** decreased from 43.5 per cent in 2010 to 33.3 per cent in 2018; it constitutes, along with the high poverty rates, a large obstacle to access to food. Expenditure on food might be high due to an estimated inflation rate of 13 per cent in April 2019 down from a high of 20 per cent in October 2018;<sup>11</sup> • **Logistics performance (AC4)** progressed from 2.6 in 2010 to 2.8 in 2018, slightly higher than the Arab average of 2.7, indicating potential hindrances to import, distribution and access to food, especially in remote areas and for the most vulnerable;
- **Unemployment rate (AC3)** increased between 2010 (8.8 per cent) and 2018 (11.4 per cent) and increased above the Arab average of 10.4 per cent. The unemployment rate among women was 23.1 per cent in 2018.<sup>12</sup> In 2017,<sup>13</sup> it was
- **Inflation, consumer prices (AC5)** increased dramatically from 11.27 per cent in 2010 to 29.5 per cent in 2017, which is well beyond the Arab average of 12.8 per cent. This is an indication of substantial fluctuations in food prices, which, combined with high poverty levels and inequity, might further constrain food access for many Egyptians. The high price volatility might have been a result of the civil disturbances that occurred during this period.

<sup>9</sup> Based on calculations by authors.

<sup>10</sup> WFP, 2018.

<sup>11</sup> World Bank, n. d.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.



## D. Utilization

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- **Population using basic drinking water services (UT1)** was close to reaching most dwellings (98.6 per cent in 2010 and 99.1 per cent in 2017). However, many Egyptians in informal settlements lack basic drinking water services;
- **Population using basic sanitation services (UT2)** reached a vast majority of the population (94.2 per cent in 2017, up from 93.4 per cent in 2010); however, intestinal diseases linked to poor sanitation and hygiene still affect people in rural areas, which might interfere with nutrient intake;<sup>14</sup>
- **Stunting in children under five years (UT3)** affected about 22.3 per cent of children in 2014, which was slightly lower than the Arab average of 22.9 per cent. It was estimated at 30.7 per cent in 2012, implying improvement. Yet, numbers are still severe based on classification by the World Health Organization (WHO) and far from the 2030 target of 12.2 per cent set by the World Health Assembly (WHA);<sup>15</sup>
- **Wasting in children under five years (UT4)** was at 9.5 per cent in 2014, which is within the medium WHO range of severity of malnutrition but higher than the WHA's target for 2030 of 3 per cent.<sup>16</sup> Concurrently, 15.7 per cent of the children under five were overweight in 2014, which is more than two times higher than the world's average of 5.5 per cent.<sup>17</sup> It exposes the double burden of malnutrition. FAO estimates that 35 per cent of the disease burden in children under five is due to malnutrition;<sup>18</sup>
- **Prevalence of anaemia among women (UT5)** is still high despite a slight decrease from 30.4 per cent in 2010 and 28.5 per cent in 2016 far from the WHA's target for 2030 of 15.2 per cent. Micronutrient deficiency is widespread in Egypt.

## E. Stability

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- **Climate change vulnerability (ST1)** was low, at 0.09, in 2019, based on the indicator adopted in the framework; other sources indicate that climate change poses a threat to Egypt due to the predicted declines in food production by at least 30 per cent by 2040 as a result of sea-level rise in northern coastal areas and a temperature increase of up to two degrees Celsius in Upper Egypt;<sup>19</sup>
- **Food price anomalies (ST2)** data are not available;
- **Political stability (ST3)** declined from approximately 19 to 12 between 2010 and 2018, indicating less stability, notably following the 2011 social unrests;
- **Food production variability (ST4)** further declined from \$7,500 to 5,300<sup>20</sup> or roughly half the Arab average (\$10,100) per capita between 2010 and 2016. Since food production is largely irrigated, the annual variability is usually limited compared to rainfed systems;

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14 WFP, 2018.

15 Food and Agricultural Organization (FAO) and others, 2019.

16 Ibid.

17 World Bank, n. d.

18 FAO and others, 2019.

19 WFP, 2018.

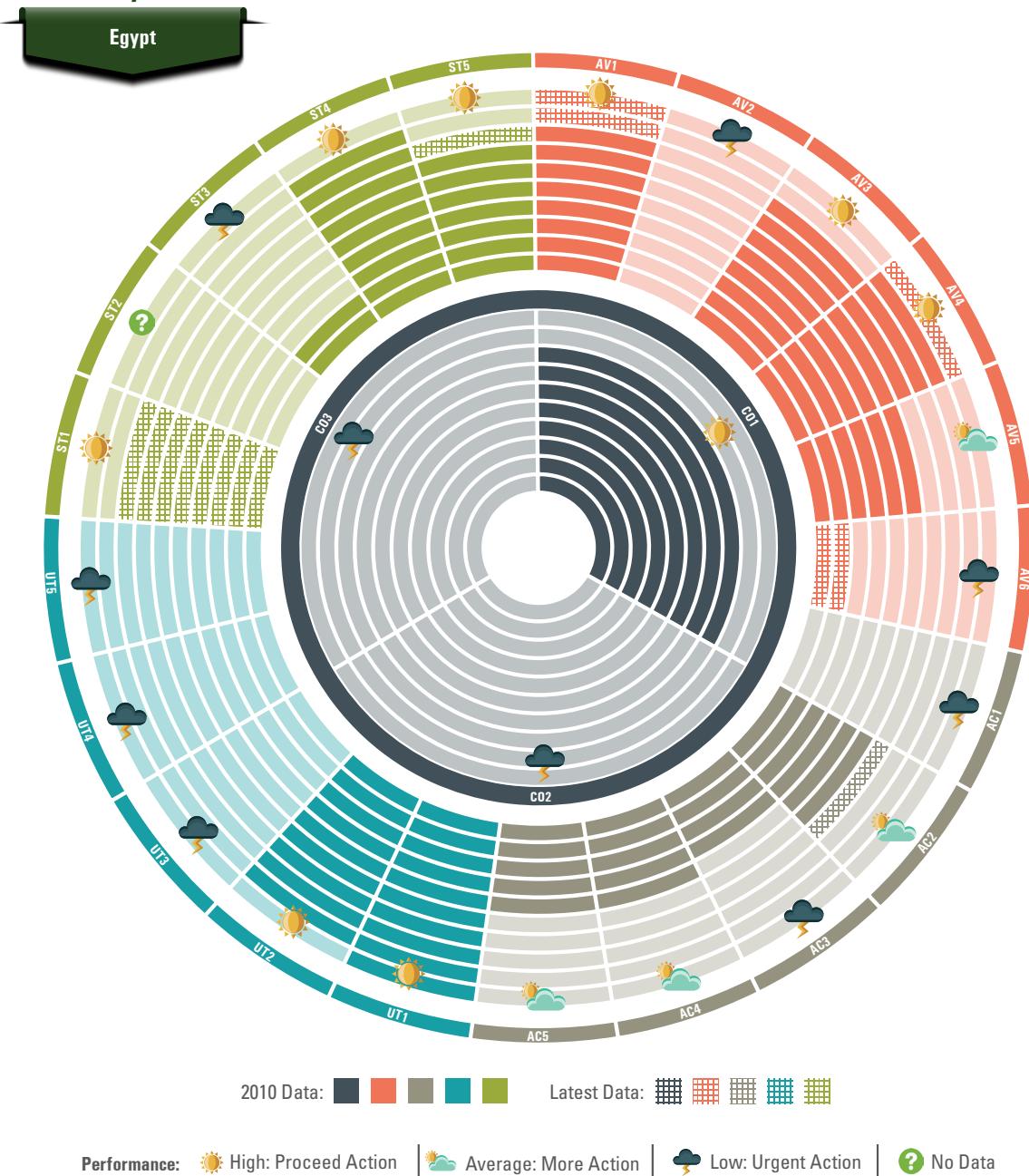
20 Constant 2004-2006 international USD.



- **Food supply variability (ST5)** also decreased from 34 kcal/capita/day in 2010

to 30 kcal/capita/day in 2013, indicating a positive trend despite the high value.

## Food security dashboard



## Food security indicators, Egypt

Indicators		Arab		Egypt			Trend
		Latest	2010	Latest	Year		
Code	Description	Value	Year	Value	Value	Year	
<strong>CORE INDICATORS</strong>							
C01	Undernourishment  %	12.1	2016	4.5	4.8	2016	
C02	Food insecurity  %	12.2	2016	n.a.	10.1	2016	
C03	Obesity  %	28.4	2016	28.0	32.0	2016	
<strong>AVAILABILITY INDICATORS</strong>							
AV1	Wheat yields - %	82.2	2017	119.9	140.9	2017	
AV2	Agriculture expenditure - index	n.a.		0.14	0.12	2017	
AV3	Food loss  %	6.8	2013	9.9	9.8	2013	
AV4	Dietary energy supply - %	131	2017	149	153	2017	
AV5	Wheat Import dependency  %	65.0	2012	43.9	42.1	2012	
AV6	Agriculture water  %	n.a.		n.a.	76.7	2017	
<strong>ACCESS INDICATORS</strong>							
AC1	Poverty  %	16.6	mult.	21.4	16.1	2015	
AC2	Food consumption  %	n.a.		43.5	33.3	2018	
AC3	Unemployment  %	10.4	mult.	8.8	11.4	2018	
AC4	Logistics - index	2.7	2016	2.6	2.8	2018	
AC5	Inflation  %	12.8	mult.	11.3	29.5	2017	
<strong>UTILIZATION INDICATORS</strong>							
UT1	Drinking water access - %	86.9	2015	98.6	99.1	2017	
UT2	Sanitation access - %	80.8	2015	93.4	94.2	2017	
UT3	Child stunting  %	22.9	mult.	n.a.	22.3	2014	
UT4	Child wasting  %	8.7	mult.	n.a.	9.5	2014	
UT5	Women anaemia  %	35.5	2016	30.4	28.5	2016	
<strong>STABILITY INDICATORS</strong>							
ST1	Climate change  - index	0.1	2019	n.a.	0.09	2019	
ST2	Price Anomalies  - index	n.a.		n.a.	n.a.		
ST3	Political stability - ranking	14	2017	19	12	2018	
ST4	Production variability  - \$1,000/capita	10.1	2016	7.5	5.3	2016	
ST5	Supply variability  - kcal/cap/day	29.8	2013	34.0	30.0	2013	

: Reversed During Normalization

n.a.= Not Available

mult.= Multiple years

Red: Negative Trend

Yellow: Neutral Trend

Green: Positive Trend

**Note:** Unless otherwise indicated, all data in this table and framework were sourced from international databases including, but not limited to, FAOSTAT, ILOSTAT, World Bank and AQUASTAT, depending on the indicator.





# Food security snapshot

## A. Drivers and determinants

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Although Egypt is performing well in terms of reduced undernourishment (CO1), the other two core indicators, food insecurity experience (CO2) and obesity (CO3), show serious underperformance meaning that the country faces concerning food security issues.

### **Major hotspots include the following:**

- **Availability:** agriculture orientation (AV2) and water use in agriculture (AV6);
- **Access:** poverty (AC1);
- **Utilization:** children stunting (UT3) and wasting (UT4) and women anaemia (UT5);
- **Stability:** political stability (ST3).

Food security and nutrition in Egypt is still defined by the double burden of malnutrition as exemplified notably among children who face food insecurity (UT3 and UT4) and obesity (CO3), both of which are on the increase. Obesity in women is concerning, as is anaemia. Stunting in children is accompanied by overweight, all of which are indicators of serious malnutrition. Although the trends seem to be leveling off, more work is needed in this area. Programmes dedicated to remedy this situation are urgently needed, with an assessment of the impact of the substantial food subsidies on malnutrition.

## B. Action areas

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Egypt is one of the world's largest importers of wheat even though its yields are also among the highest in the world. The amount of water and arable land that can be used to increase production are very limited meaning that the country will remain heavily reliant on imports. These may become more affordable if food subsidies become more targeted and if the gas sector becomes a significant contributor to the economy.

It will not solve issues associated with unequal access to food, itself associated with poverty, marginalization and unemployment, especially for women, but renewed and more targeted efforts could help lessen inequities. The marginalization of selected parts of the population is associated with poor physical food access, as evidenced by the logistics index, and is also hindered by rampant food inflation.



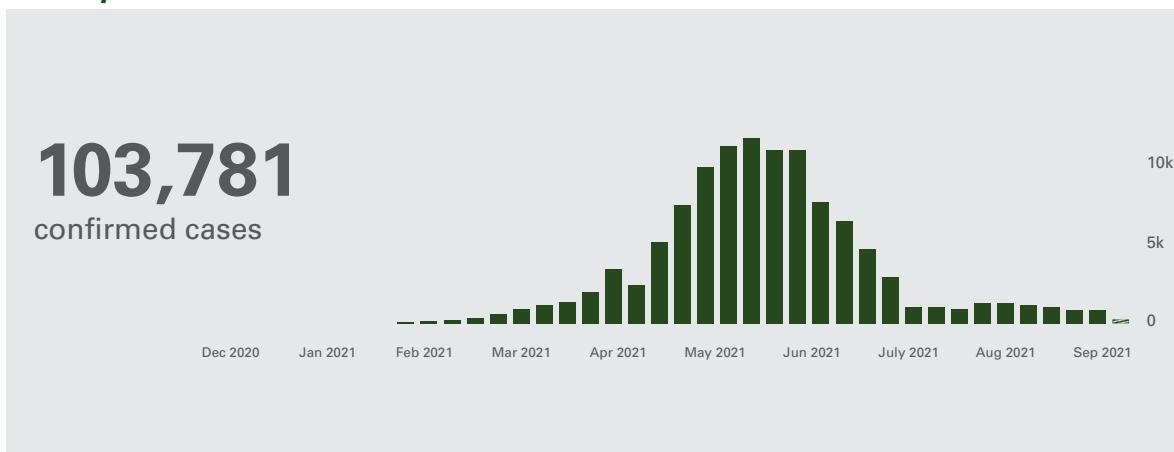


# Impact of COVID-19

The COVID-19 pandemic reached Egypt in early March 2020 and, by early October, had

affected more than 100,000 people with close to 6,000 recorded deaths.<sup>21</sup>

## Weekly cases



Source: World Health Organization (WHO), n. d.

The country recorded an increase in the unemployment rate as it reached 9.2 per cent by the end of April 2020 and 9.6 per cent by the second quarter<sup>22</sup> due to lockdown measures.<sup>23</sup> Among others, this translated into a loss of some 1.6 million employees in the informal sector.<sup>24,25</sup> If the informal sector

continues to be affected, the unemployment rate could reach 18.1 per cent.<sup>26</sup>

Food production is not anticipated to be much affected by the COVID-19 pandemic; however, food supply might be disrupted due to shortage in labour and agricultural inputs

21 World Health Organization (WHO), 2020.

22 Egyptian Streets, 2020; and Enterprise Press, 2020.

23 Air travel was suspended; dine-in venues and religious sites were closed; and curfew was imposed from 19:00-06:00.

24 The most vulnerable segment of the population are those people who work in the informal sector as they lack social benefits or labor protection.

25 Middle East Monitor, 2020a; and Organisation for Economic Co-operation and Development (OECD), 2020.

26 OECD, 2020.



such as fertilizers and seeds, in addition to the potential impact of trade restrictions that might be imposed by exporting countries.<sup>27</sup> Egypt bought approximately 120,000 tons of wheat (shipped in two batches, namely, May 15-25 and May 26-June 5) on global markets and another 578,000 tons locally produced wheat to ensure continued food availability.<sup>28</sup>

Compared to the wheat imports of 1.27 million tons during 2019-2020, Egypt increased its 2020-2021 wheat imports to 1.29 million tons.<sup>29</sup> It also diversified its food suppliers by accrediting Brazilian companies, among others.<sup>30</sup> Moreover, Egypt halted, for a limited time, the export of locally produced legumes to ensure continued

local availability.<sup>31</sup> Collection centres were established close to farmers to facilitate the purchasing of wheat and other commodities from local farmers, who were exempted from nightly curfews during the month of Ramadan (April-May) to facilitate harvesting, transporting and distributing food.<sup>32</sup>

Through these actions on multiple fronts, the Government and certain organizations were able to maintain food stability, at least up to this date. This was facilitated by the prevailing low world food prices and the relatively limited impact of the pandemic on the country, notably in rural areas.

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27 World Bank, 2020.

28 Egypt Today, 2020a; and Reuters, 2020.

29 Grainmart India, 2020.

30 ANBA Brazil-Arab News Agency, 2020.

31 IMF, 2020; and Partnership for Evidence-Based Response to COVID-19 (PERC), 2020.

32 Agri2day, 2020; and Reuters, 2020.



## **Box 2. Examples of initiatives to improve food security**

### ***Government-led initiatives***

Egypt's fiscal policies included the disbursement of \$6.4 billion to support both the stock market and poor families.<sup>a</sup> Approximately \$2.9 million were geared towards irregular/informal workers who had lost their jobs because of COVID-19, including women, with each worker receiving approximately \$32 in cash for three months.<sup>b</sup> In addition, farmers received support in the form of offset fixed prices for wheat and bran in an attempt to prevent an increase in the price of bread. The Government delayed debt payment for farmers for six months as well as the payment of tax on agricultural land for two years.<sup>c</sup> It also reduced the price of wheat seeds to facilitate planting.<sup>d</sup>

The Government increased investments in irrigated agricultural areas by 2 per cent and developed a five-pillar plan aiming to expand the cultivation of wheat, oil crops and sugar crops, improve the productivity of sugar cane and establish stores for basic commodities to achieve self-sufficiency.<sup>e</sup>

### ***Other initiatives***

In mid-March, the Egyptian Food Bank launched a campaign to deliver food to the most affected, distributing food boxes to 600,000 families by the end of Ramadan. This campaign was supported by 70 private-sector companies with donations expected to reach \$9.55 million.<sup>f</sup>

WFP distributed unconditional cash transfers to families affected by the economic crisis caused by the pandemic exchangeable for nutritious food at local shops. Community teachers and school students in nine governorates received such transfers during the months of March, April, May, June and July.<sup>g</sup>

In April, in collaboration with the United Nations High Commissioner for Refugees (UNHCR), WFP provided general food assistance (GFA) to 147,779 refugees, asylum seekers and casual workers.<sup>h</sup> In May, in collaboration with the Ministry of Manpower and Immigration, it provided GFA and unconditional cash transfers to 113,000 refugees and asylum seekers and 44,000 Egyptian workers.<sup>i</sup>

WFP provided monthly cash assistance of approximately \$512 to 76,000 female-headed families and widows not benefiting from the "Takaful and Karama" national programme. As part of the "First 1,000 days" national programme, 38,000 children under two and lactating mothers of poor families, impacted by the economic crisis and registered in the "Takaful and Karama" programme, received \$261 each.<sup>j</sup>

WFP provided technical support for land consolidation, improved irrigation and provision of new crops and seed varieties to smallholder farmers to improve their production.<sup>k</sup>

WFP provided online sessions on healthy eating habits and provided residents with healthy recipes during the month of Ramadan as part of the UNitedWeEat<sup>l</sup> programme, in addition to a food safety campaign in collaboration with the United Nations Children's Fund (UNICEF) and WHO.<sup>m</sup>

WFP, in collaboration with Community Development Associations (CDAs), provided training on raising ducks, goats and bee-keeping to smallholders and provided 5,472 male and female smallholders with ducks, goats and bees as part of in-kind microloans.<sup>m</sup>

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a Organisation for Economic Co-operation and Development (OECD), 2020.

b Ibid.

c International Food Policy Research Institute (IFPRI) Egypt, 2020; and IMF, 2020.

d Grainmart India, 2020.

e IFP Info, 2020.

f Middle East Monitor, 2020b.

g WFP, 2020.

h Ibid.

i Ibid.

j Ibid.

k Ibid.

l Ibid.

m Ibid.





## References

- Agri2Day (2020). "اجري توداي، الحكومة تعتمد تسعيرات جديدة لتوريد القمح والوقاية من كورونا". (April 24) (Arabic). Available at <https://www.agri2day.com/2020/04/24/> (accessed September 9, 2020).
- ANBA Brazil-Arab News Agency (2020). Egypt greenlights exports from 42 plants in Brazil (April 8). Available at <https://anba.com.br/en/egypt-greenlights-exports-from-42-plants-in-brazil/> (accessed September 8, 2020).
- Ecker, O. and others (2016). Nutrition and economic development: Exploring Egypt's exceptionalism and the role of food subsidies. International Food Policy Research Institute, Washington, D.C. Available at <https://www.ifpri.org/publication/nutrition-and-economic-development-exploring-egypts-exceptionalism-and-role-food-0>.
- Egyptian Streets (2020). Protecting Small Businesses and Reducing Unemployment: Egypt's COVID-19 Recovery Efforts (May 16). Available at <https://egyptianstreets.com/2020/05/16/protecting-small-businesses-and-reducing-unemployment-egypts-covid-19-recovery-efforts/> (accessed September 8, 2020).
- Egypt Today (2020a). Egypt buys less wheat than anticipated at tender to boost reserves (April 15). Available at <http://www.egypttoday.com/Article/3/84733/Egypt-buys-less-wheat-than-anticipated-at-tender-to-boost> (accessed September 8, 2020).
- \_\_\_\_\_ (2020b). Capital economics expects Egyptian currency to decline 7.5 % by end of 2020 (April 9). Available at <http://www.egypttoday.com/Article/3/84505/Capital-Economics-expects-Egyptian-currency-to-decline-7-5-by> (accessed September 9, 2020).
- Enterprise Press (2020a). Egypt's unemployment rate rose to a near two-year high in 2Q2020 (August 18). Available at <https://enterprise.press/stories/2020/08/18/egypts-unemployment-rate-rose-to-a-near-two-year-high-in-2q2020-20456/> (accessed September 12, 2020).
- \_\_\_\_\_ (2020b). ٢٠٢٠ يشهد ارتفاعاً ملحوظاً في معدل البطالة يصل إلى ٦,٩٪ خلال الربع الثاني لعام ٢٠٢٠ (Arabic). Available at [https://enterprise.press/wp-content/uploads/2020/08/202081710522\\_labour-force.pdf](https://enterprise.press/wp-content/uploads/2020/08/202081710522_labour-force.pdf) (accessed September 12, 2020).
- Food and Agricultural Organization (FAO) (2019). Food loss and waste in Egypt. FAO, Cairo. Available at <http://www.fao.org/3/ca4310en/CA4310EN.pdf>.
- Food and Agricultural Organization (FAO) and others (2019). The State of Food Security and Nutrition in the World: Safeguarding against economic slowdowns and downturns. Rome. Available at <http://www.fao.org/3/ca5162en/ca5162en.pdf>.
- \_\_\_\_\_ (2020). The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome. Available at <http://www.fao.org/3/ca9692en/CA9692EN.pdf> (accessed September 7, 2020).
- FAO Global Information and Early Warning System (GIEWS) (2019). Country Briefs: Egypt. Available at <http://www.fao.org/giews/countrybrief/country.jsp?code=EGY>.
- Goldschmidt, A.E. and others (2019). Egypt. Encyclopedia Britannica. Available at <https://www.britannica.com/place/Egypt> (accessed March 2020).
- Grainmart India (2020). Egypt Imports High Quantity of Wheat to Maintain its Food Security Amid COVID-19 (September 23). Available at <https://www.grainmart.in/news/egypt-imports-high-quantity-of-wheat-to-maintain-its-food-security-amid-covid-19/> (accessed September 24, 2020).
- IFP Info (2020). Enhancing food security: Egypt increases 20/21 FY allocations for agriculture by 2% (June 23). Available at <http://www.ifpinfo.com/enhancing-food-security-egypt-increases-20-21-fy-allocations-for-agriculture-by-2/> (accessed September 09, 2020).
- International Food Policy Research Institute (IFPRI) Egypt (2020). COVID-19 food policy response monitor for Egypt (March 7). Available at <https://egyptssp.ifpri.info/2020/06/01/covid-19-food-policy-response-monitor-for-egypt-2/> (accessed September 9, 2020).
- International Monetary Fund (IMF) (2019). World Economic Outlook Databases. Available at <https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/> (accessed March 2020).
- \_\_\_\_\_ (2020). Policy Responses to COVID-19. Available at <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19> (accessed September 9, 2020).



- Middle East Monitor (2020a). Egypt's informal sector struggles for food amid COVID-19 lockdown (April 8). Available at <https://www.middleeastmonitor.com/20200408-egypts-informal-sector-struggles-for-food-amid-covid-19-lockdown/> (accessed September 8, 2020).
- \_\_\_\_\_. (2020b). Egypt food bank serving 300% more families this Ramadan (May 4). Available at <https://www.middleeastmonitor.com/20200504-egypt-food-bank-serving-300-more-families-this-ramadan/> (accessed September 9, 2020).
- Mueller, N.D. and others (2012). Closing yield gaps through nutrient and water management. *Nature*, vol. 490, pp. 254-257. Available at <https://www.nature.com/articles/nature11420?platform=oscar&draft=journal>.
- Organisation for Economic Co-operation and Development (OECD) (2020). The COVID-19 crisis in Egypt (April 20). Available at <https://www.oecd.org/mena/competitiveness/The-Covid-19-Crisis-in-Egypt.pdf> (accessed September 9, 2020).
- Partnership for Evidence-Based Response to COVID-19 (PERC) (2020). Effective Implementation of Public Health and Social Measures in Egypt: Situational Analysis. Available at [https://preventepidemics.org/wp-content/uploads/2020/05/perc\\_situation-analysis\\_egypt.pdf](https://preventepidemics.org/wp-content/uploads/2020/05/perc_situation-analysis_egypt.pdf) (accessed September 9, 2020).
- Reuters (2020). Unfazed by coronavirus, Egypt's farmers harvest their wheat (April 30). Available at <https://www.reuters.com/article/us-health-coronavirus-egypt-harvest-idUSKBN22C2OH>.
- USAID (2017). Agriculture. Available at [https://www.usaid.gov/sites/default/files/documents/1883/5\\_USAIDEgypt\\_Agriculture\\_Fact\\_Sheet\\_Sep2017\\_EG\\_OK.pdf](https://www.usaid.gov/sites/default/files/documents/1883/5_USAIDEgypt_Agriculture_Fact_Sheet_Sep2017_EG_OK.pdf).
- World Food Programme (WFP) (2018). Egypt Country Strategic Plan (2018-2023). Rome. Available at <https://www.wfp.org/operations/eg02-egypt-country-strategic-plan-2018-2023>.
- \_\_\_\_\_. (2020). WFP Egypt Country Brief. Available at <https://reliefweb.int/country/egy> (accessed September 11, 2020).
- World Health Organization (WHO) (n. d.). COVID-19 dashboard. Available at <https://covid19.who.int/region/emro/country/eg> (accessed October 6, 2020).
- \_\_\_\_\_. (2020). Obesity and overweight (April 1). Available at <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>.
- World Bank (n. d.). Open Data. Available at <https://data.worldbank.org/>.
- \_\_\_\_\_. (2018). International LPI: Global Rankings. Available at <https://lpi.worldbank.org/international/global> (accessed March 2020).
- \_\_\_\_\_. (2020). Food Security and COVID-19. Available at <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19> (accessed September 8, 2020).







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