# Arab food security monitoring framework

## Country reviews

## Algeria

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Shared Prosperity Dignified Life

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Economic and Social Commission for Western Asia

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## Algeria

UNITED NATIONS
Beirut

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# Contents

# Key Messages


The monitoring availability framework shows that Algeria is facing the triple burden of malnutrition, with elevated rates of obesity, child wasting and anaemia among women. The country has a high food import dependency with high unemployment which could further impact its food security. The country profile reviews the impact of COVID-19, early measures against it and their effect on the food situation.

OBESITY

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.[1] 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",[2] 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.

1 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.

2 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);

**1 Core Indicators (CO)**

| Code | Indicator description | Short name | SDG linkage |
|---|---|---|---|
| CO1 | Prevalence of undernourishment Ⓡ % | Undernourishment | 2.1.1 |
| CO2 | Prevalence of moderate or severe food insecurity measured using FIES Ⓡ % | Food insecurity | 2.1.2 |
| CO3 | Prevalence of obesity in the adult population (18 years and older) Ⓡ % | Obesity | |

Ⓡ : 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;

**2 Food Availability Indicators (AV)**

| Code | Indicator description | Short name | SDG linkage |
|---|---|---|---|
| AV1 | Primary wheat yield as a percentage of potential achievable yield - % | Yields | 2.3.1 |
| AV2 | Agriculture Orientation index for government expenditures - Index | Agriculture expenditure | 2.a.1 |
| AV3 | Food losses (% total food available) Ⓡ % | Food loss | 12.3 |
| AV4 | Average dietary energy supply adequacy - % | Dietary energy supply | |
| AV5 | Wheat import dependency ratio Ⓡ % | Import dependency | |
| AV6 | Share of water resources used in agriculture out of total renewable water resources Ⓡ % | 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 (R) % | Poverty | 1.1.1/1.2.1/1.2.2 |
| AC2 | Share of food consumption expenditure in total household consumption expenditure (R) % | Food consumption | |
| AC3 | Unemployment rate (R) % | Unemployment | 8.5.2 |
| AC4 | Logistics performance - index | Logistics | |
| AC5 | Inflation, consumer prices (R) % | 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 (R) % | Child stunting | 2.2.1 |
| UT4 | Children under 5 years of age affected by wasting (R) % | Child wasting | 2.2.2 |
| UT5 | Anaemia among women of reproductive age (15-49 years) (R) % | 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 (R) | Climate change | |
| ST2 | Food price anomalies standard deviation (R) | Price anomalies | 2.c.1 |
| ST3 | Political stability and absence of violence - ranking | Political stability | |
| ST4 | Per capita food production variability - $1,000/capita (R) | Production variability | |
| ST5 | Per capita food supply variability - kcal/capita/day (R) | 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[3] under the title "Tracking Food Security in the Arab Region".[4] 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[5] and Beirut[6] 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

3 See 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.

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

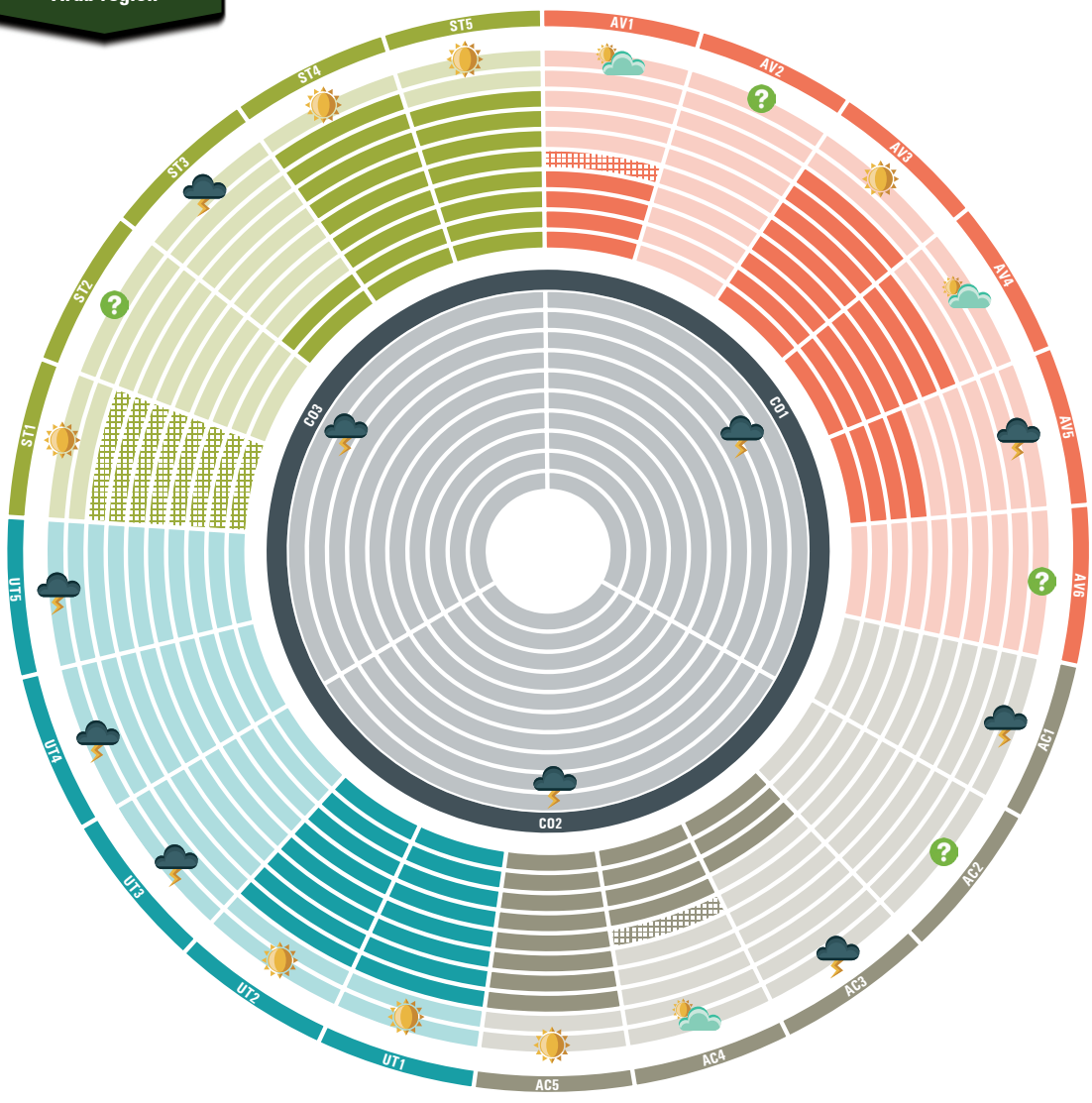
6 See https://www.unescwa.org/events/training2-food-security-monitoring-framework-arab.

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

**Arab region**




2010 Data: Latest Data:

**Performance:** High: Proceed Action | Average: More Action | Low: Urgent Action | No Data

## Food security indicators, world vs. Arab region

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

(R): 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

Although Algeria is the largest country of the Arab region by land mass, it is dominated by the extensive Sahara Desert with a narrow coastal zone being the most economically active. The country is water-thirsty as the per capita renewable water availability is less than 300 cubic metres per capita per year putting it well below the absolute water scarcity threshold of 500 cubic metres per capita per year.[1]

### **Box 1.** Food production in the Algerian desert

Algeria hosts a small number of refugees in the desert region of Tindouf, in the south-west of the country where livelihood opportunities are lacking. Their food security and nutrition status are poor, and, as such, they rely on food assistance. In 2018, a WFP assessment survey showed that only 12 per cent of the refugee population was food secure. Vulnerability to food insecurity affected 58 per cent of the population, while 30 per cent were food insecure mostly as a result of the widespread poverty.

WFP is attempting to address this rampant poverty and food insecurity through fish farming and hydroponic projects. Since the arid desert does not offer many potential sources of income or agricultural opportunities, notably to develop livestock production, it is the main source of both revenues and proteins for the vulnerable population. Small hydroponics units were installed in greenhouses using locally available materials to produce fodder in seven-day cycles in a semi-controlled environment powered with solar energy.

The fodder is grown in tray-sized hydroponic systems that require 90 per cent less water since it relies on a soil-less special solution that allows crops to grow twice as fast as in traditional farming. The population uses the fodder to feed their herds allowing them to produce the needed milk and meat thereby becoming less reliant on food aid while also offering sources of income opportunities both by selling fodder and animal products.

**Source:** World Food Programme (WFP), 2019; and WFP, 2017.

1 Food and Agriculture Organization (FAO), 2014.

## B. Socioeconomy

Algeria's economy was essentially agricultural until independence in the early 1960s. It is now mainly based on the export of oil and gas products and, among others, has experienced a substantial rural transformation.[2] Per capita gross domestic product (GDP) stands at about $4,800 with the share of agriculture in total GDP standing at about 12 per cent in 2018.[3]

The country's population of about 44 million as of 2020 estimated by the United Nations,[4] is concentrated in the narrow coastal strip bordering the Mediterranean Sea. Algeria has experienced fast-paced urbanization, with 72.6 per cent of the inhabitants categorized as urban in 2017, up from 52 per cent in 1990.[5] Poverty is decreasing and is mostly a rural phenomenon; unemployment remains above 10 per cent.[6] The agriculture sector employs more than one fifth of the labour force.[7]

## C. Agriculture and food security

Algeria is heavily dependent on food imports and has a food import bill of about $8.4 billion per year.[8] The value of food imports over total merchandise was estimated at 11 per cent in 2011-2013 with Algeria's large oil export being the reason that agricultural imports as a share of the value of merchandise is on the lower end compared to other Arab countries. In 2016, Algeria dedicated 4.8 per cent of its GDP to food imports compared to 5.22 per cent in 2015, which was a significant increase from 2010, when Algeria dedicated 3.33 per cent of its GDP to food import.

2 FAO, 2019.
3 World Bank, n. d.
4 United Nations Department of Economic and Social Affairs (UN-DESA) Population Division, 2019.
5 Food and Agriculture Organization (FAO), n. d.a.
6 Trading Economics, n. d.
7 Oxford Business Group, 2015.
8 Oxford Business Group, 2018.

# Data and trends

## A. Core indicators

- **Prevalence of Undernourishment (CO1)** decreased from 6.3 per cent in 2010 to 4.7 per cent in 2016 denoting serious efforts exerted towards eradicating undernourishment, notably considering that the prevalence of undernourishment revolved around 10.8 per cent in the early 2000s. The 2016 Arab region average is much higher, at 12.1 per cent;
- **Prevalence of severe food insecurity (CO2)** affected 8.3 per cent of the population in 2015-2017. Since the indicator was developed recently, there is not enough data to chart a trend starting from 2010. The prevalence is below the Arab regional average (12.2 per cent for 2016);
- **Prevalence of adult obesity (CO3)** increased from 23.3 per cent in 2010 to 27.4 per cent in 2016, which is at par with the Arab region average (28.4 per cent). Adult obesity is more prevalent among women (34.9 per cent) than among men (19.9 per cent). The overall trend is alarming as Algeria has been recording increasing rates of obesity since 2000, when it stood at 17.4 per cent.[9]

## B. Availability

- **Wheat yield to potential (AV1)** was estimated at 34.6 per cent of potential yields in 2010 and decreased to 26.8 per cent in 2017, compared to a potential Arab regional average wheat yield of 82.2 per cent in 2017. Yields in Algeria tend to fluctuate substantially though with a long-term upward trend;
- **Agriculture Orientation Index (AV2)** data are not available;
- **Food losses to food available (AV3)** decreased slightly from about 7 per cent in 2010 to 6.8 per cent in 2013, which was equal to the Arab average (6.8 per cent). Food losses data might not be fully accurate as several crops lack related data. They do not also account for food waste;
- **Average dietary energy supply adequacy (AV4)** increased from 135 per cent in 2010 to 146 per cent in 2017 and is well

9 Knoema, n. d.

above the Arab region average of 131 per cent. The high value points to a high availability of food in markets, which imply that the poorer tranche of the population is likely to have access to food;

- **Wheat import dependency (AV5)** stood at about 72 per cent in 2012, which was substantially higher than the Arab average (65 per cent). The inability to produce more food domestically and a transition towards western diet imply that Algeria has to rely on food imports;

- **Water resources used in agriculture (AV6)** stands at 54.8 per cent, while the annual renewable water resources availability is only 282.4m$^3$/capita/year, well below the water scarcity threshold of 1,000m$^3$/capita year.

## C. Access

- **Poverty ratio at $3.2/day (AC1)** was about 4 per cent in 2011, well below the Arab average of 16.6 per cent in 2015. Though no recent data are available, a high unemployment rate might suggest that poverty levels might have increased in recent years, particularly with falling oil prices;

- **Food consumption share of expenditures (AC2)** decreased from 43.7 per cent in 2010 to 37.3 per cent in 2018. Despite this decrease, the share of food expenditures is still high, pointing towards low revenues for most of the population;

- **Unemployment rate (AC3)** was 12.2 per cent in 2018, an increase from 10 per cent in 2010. It is also higher than the Arab regional average, which was at 10.4 per cent in 2018. The high and increasing unemployment rate is an indication of worsening economic conditions, which could hamper access to food;

- **Logistics performance (AC4)** ticked slightly higher between 2010 (2.4) and 2018 (2.5) though it is still below the Arab average (2.7). The country could be facing challenges to supply the needed food in markets, notably in remote areas;

- **Inflation, consumer prices (AC5)** rose from 3.9 per cent to 4.3 per cent between 2010 and 2018, respectively, though remaining well below the Arab regional average of 12.8 per cent of 2018. The inflation is slightly higher than the accepted healthy range of 2-3 per cent inflation rate per year, which could be an early warning sign of a decrease in access to food.

## D. Utilization

- **Population using basic drinking water services (UT1)** progressed from 92.4 per cent in 2010 to 93.6 per cent in 2017, well above the Arab average of 86.9 per cent. The country is moving in the right direction towards achieving the 100 per cent SDG target;

- **Population using basic sanitation services (UT2)** shows some progress and moved from 86.6 per cent to 87.6 per cent between 2010 and 2017, respectively, higher than the Arab average of 80.8 per cent. Additional efforts need to be exerted if Algeria is to achieve the 100 per cent target of the SDGs by 2030;

- **Stunting in children under five years (UT3)** represented 11.7 per cent of all children in 2012. Although it is substantially lower

than the Arab average (22.9 per cent) of 2017 and a major improvement when compared to the year 2000 when it was 23.6 per cent. Algeria still needs to adopt good policies to eradicate stunting;

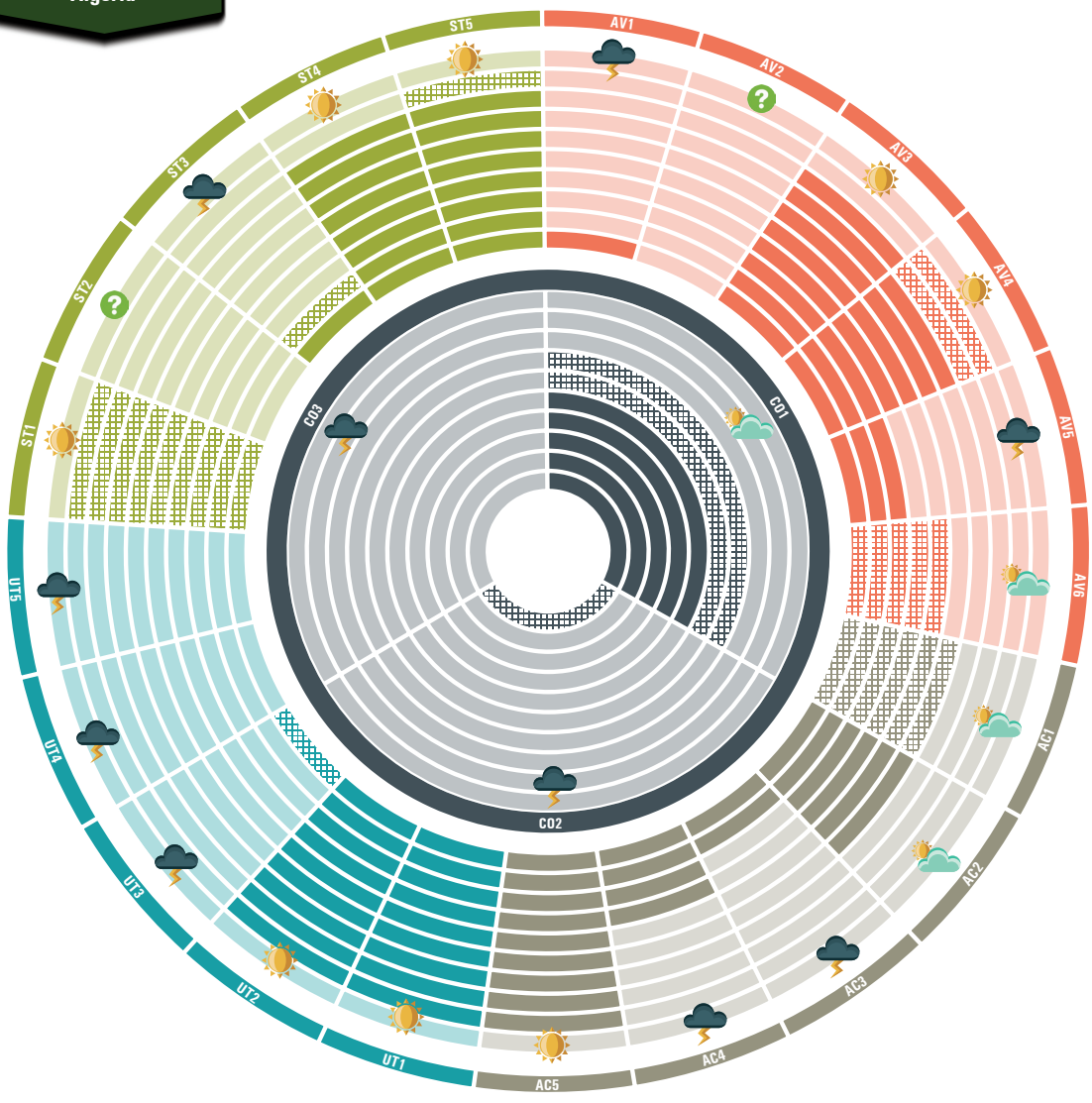
- **Wasting in children under five years (UT4)** is low in Algeria according to the latest recorded figure in 2012 (4.1 per cent), which is a good progress from its 2002 high of 9.6 per cent. It is also lower than the Arab average of 8.7 per cent;
- **Prevalence of anaemia among women (UT5)** is high with a percentage of 35.7 per cent in 2016, on par with the average value for the Arab region (35.5 per cent in 2016), though it increased from 33.3 per cent in 2010. This is a concern which needs to be urgently addressed.

## E. Stability

- **Climate change vulnerability (ST1)** is low (0.05), indicating that Algeria might not be significantly impacted by climate change, including increase in weather-related disasters, sea-levels rise and loss of agricultural productivity;
- **Food price anomalies (ST2)** data were not available;
- **Political stability (ST3)** ranking improved from about 12 in 2010 to 19 in 2018. The ranking is still low on a scale of 100 indicating that the country still faces substantial challenges that might affect food security;
- **Food production variability (ST4)** increased between 2010 ($14,000/capita) and 2016 ($20,300/capita), which was higher than the Arab average ($10,100/capita), which reflects the continued high fluctuations in domestic food production;
- **Food supply variability (ST5)** experienced a positive trend between 2010 and 2013 as it decreased from 27 kcal/cap/year to 13 kcal/cap/year and well below the Arab average of 29.8 kcal/cap/year.

## Food security dashboard

**Algeria**




2010 Data: Latest Data:

**Performance:** High: Proceed Action | Average: More Action | Low: Urgent Action | No Data

## Food security indicators, Algeria

| Indicators | | Arab | | Algeria | | | |
|---|---|---|---|---|---|---|---|
| | | Latest | | 2010 | Latest | | Trend |
| Code | Description | Value | Year | Value | Value | Year | |
| **CORE INDICATORS** | | | | | | | |
| CO1 | Undernourishment (R) % | 12.1 | 2016 | 6.3 | 4.7 | 2016 | ● |
| CO2 | Food insecurity (R) % | 12.2 | 2016 | n.a. | 8.3 | 2016 | |
| CO3 | Obesity (R) % | 28.4 | 2016 | 23.3 | 27.4 | 2016 | ● |
| **AVAILABILITY INDICATORS** | | | | | | | |
| AV1 | Wheat yields - % | 82.2 | 2017 | 34.6 | 26.8 | 2017 | ● |
| AV2 | Agriculture expenditure - index | n.a. | | n.a. | n.a. | | |
| AV3 | Food loss (R) % | 6.8 | 2013 | 7.1 | 6.8 | 2013 | ● |
| AV4 | Dietary energy supply - % | 131 | 2017 | 135 | 146 | 2017 | ● |
| AV5 | Wheat Import dependency (R) % | 65.0 | 2012 | 70.6 | 72.2 | 2012 | ● |
| AV6 | Agriculture water (R) % | n.a. | | n.a. | 54.8 | 2018 | |
| **ACCESS INDICATORS** | | | | | | | |
| AC1 | Poverty (R) % | 16.6 | mult. | n.a. | 3.9 | 2011 | |
| AC2 | Food consumption (R) % | n.a. | | 43.7 | 37.3 | 2018 | ● |
| AC3 | Unemployment (R) % | 10.4 | mult. | 10.0 | 12.2 | 2018 | ● |
| AC4 | Logistics - index | 2.7 | 2016 | 2.4 | 2.5 | 2018 | ● |
| AC5 | Inflation (R) % | 12.8 | mult. | 3.9 | 4.3 | 2018 | ● |
| **UTILIZATION INDICATORS** | | | | | | | |
| UT1 | Drinking water access - % | 86.9 | 2015 | 92.4 | 93.6 | 2017 | ● |
| UT2 | Sanitation access - % | 80.8 | 2015 | 86.6 | 87.6 | 2017 | ● |
| UT3 | Child stunting (R) % | 22.9 | mult. | n.a. | 11.7 | 2012 | |
| UT4 | Child wasting (R) % | 8.7 | mult. | n.a. | 4.1 | 2012 | |
| UT5 | Women anaemia (R) % | 35.5 | 2016 | 33.3 | 35.7 | 2016 | ● |
| **STABILITY INDICATORS** | | | | | | | |
| ST1 | Climate change (R) - index | 0.1 | 2019 | n.a. | 0.05 | 2019 | |
| ST2 | Price Anomalies (R) - index | n.a. | | n.a. | n.a. | | |
| ST3 | Political stability - ranking | 14 | 2017 | 12 | 19 | 2018 | ● |
| ST4 | Production variability (R) - $1,000/capita | 10.1 | 2016 | 14.2 | 20.3 | 2016 | ● |
| ST5 | Supply variability (R) - kcal/cap/day | 29.8 | 2013 | 27.0 | 13.0 | 2013 | ● |

(R): 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 figuring in this table and framework have been sourced from international databases or national sources.

# Food security snapshot

## A. Drivers and determinants

The framework shows that Algeria's food security is relatively precarious as evidenced by the core indicators. The country has a low level of undernourishment (CO1) though additional efforts could be exerted as well. However, its food insecurity experience (CO2) is worrying, and obesity (CO3) levels are alarming, indicating that Algeria has to exert more efforts to reverse the low levels within the core pillar of food security.

Yields remain far below their potential (AV1) which further explains its high dependency on food imports (AV5). However, a rise in the average dietary energy supply adequacy (ADESA) indicates continued availability of food, which is good for vulnerable populations despite its potential negative impact on the food import bill (AV4). To buffer against systemic food price shocks, it would be necessary to enhance local wheat production, which in return would mean to increase investments in agriculture (AV2) and related technologies, notably to improve the management of the limited water resources.

Unemployment (AC3) is rising which may curtail access to food if social safety nets are inadequate and the overall logistics (AC4) remains subpar. Expenditure on food (AC2) experienced a favourable trend while poverty (AC1) is relatively low, which might indicate slightly improving livelihoods conditions, notably for poorer consumers.

UT1 and UT2 show positive trends, which are steps closer to reaching the respective 100 per cent SDG benchmark by 2030. Stunting (UT3) and wasting (UT4) among children and anaemia in adult women (UT5) are major hotspot areas that need urgent action.

Political stability (ST3) is a hotspot even though it improved slightly while the remaining stability indicators point towards improvement, which could benefit the long-term food security situation of the country.

## B. Action areas

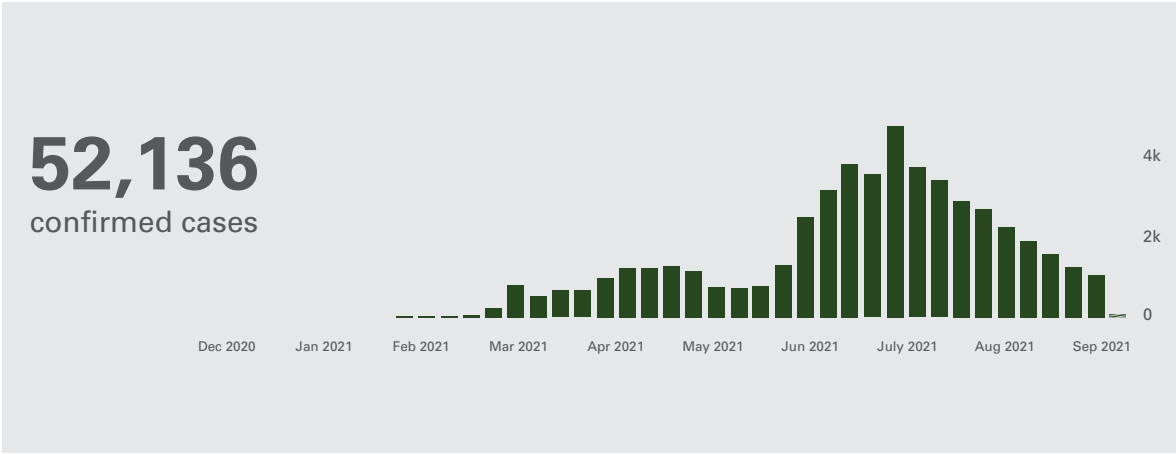
To further improve the monitoring of food security, the issue of data availability will need to be addressed. Yearly data are lacking for the agriculture orientation index for Government expenditures and food price anomalies and for a few other indicators. Adequate and accurate data are needed to strengthen the sustainability of Algeria's food system and, consequently, its food security and nutrition.

# Impact of COVID-19

The COVID-19 pandemic reached Algeria in early February 2020 and, by late September, had affected more than 52,000 people with more than 1,700 recorded deaths. In the early period, until mid-June, Algeria was largely recording less than 100 daily occurrences of COVID-19 with a peak in mid-May. Since mid-June, Algeria witnessed a sharp increase in cases with a peak reaching up to 600 daily cases towards end July, which have since decreased to the mid-May level.[10]

Prior to the pandemic, 7.4 million people were moderately or severely food insecure.[11] However, due to the restrictive measures implemented to control the pandemic, the number of food-insecure people is expected to rise. The household impact survey of vulnerable people in the Tindouf refugee camp shows that 26 per cent of respondents record poor food consumption, out of which 88 per cent do not have enough money to purchase food, and 51 per cent are borderline. Only 16 per cent have an income

**Weekly cases**




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

10 World Health Organization (WHO), n. d.
11 FAO and others, 2020.

source.[12] COVID-19 lockdown measures[13] induced a panic buying of food products, especially staples such as semolina and wheat as people feared food shortages.[14] This led to an increase in food prices by up to 2.3 per cent.[15]

General unemployment figures exceeded 12 per cent, but surpassed 20 per cent among higher-education and vocational-training graduates.[16] The pandemic hit Algeria as the country was grappling with demonstrations that have been taking place for over a year and a fall in oil prices that has weakened the country's economy. In addition, Algeria's foreign exchange reserves dropped from $193.6 billion in 2014 to less than $60 billion by the end of 2020.[17] These challenges together exacerbated the already low purchasing power of Algerians,[18] which further decreased their access to food.[19] This multidimensional crisis, characterized by political instability, economic decline and a health crisis, raised concerns on the ability of the country to face the pandemic and prevent a deterioration of the food security situation.[20]

12 World Food Programme (WFP), 2020a.
13 Lockdown measures included banning public gatherings, public transportations and dining venues; closure of public and private schools and universities; and halting of land, air and sea transportation and travelling except for freights.
14 Reuters, 2020; and TSA, 2020
15 Ghanem, D., 2020.
16 Friedrich Ebert Stiftung, 2020.
17 Independent Online (IOL), 2020; and NESAcenter, 2020.
18 The purchasing power of the Algerian population had weakened even before the COVID-19 crisis, after the decline of the dinar by 49 per cent between 2014 and 2019, coupled with an increase in food prices of 2.3 per cent, though salaries had yet to increase since 2012.
19 Ghanem, D., 2020.
20 Atlantic Council, 2020.

## **Box 2.** Examples of initiatives in support of food security

### *Government initiatives*

The Government exempted agricultural workers from curfews and facilitated the opening of agricultural input stores to avoid disrupting agricultural activities.[a]

In March, the Government issued new wheat tenders to top up grain reserves and avoid shortages of foodstuff while, in April, it purchased around eight million tons of soft and durum wheat and imposed export bans on food products. The Government postponed customs formalities to speed up customs procedures of imported food.[b]

The Government prioritized investments in the agriculture sector, notably in the cereal sector, including maize, but also sugar and cooking oil. It approved the direct sale of wheat from mills to consumers and encouraged people to buy and consume local produces to reduce reliance on imports.[c]

The Government organized a National Solidarity Convoy from Ghardaia Province in May 2020 to support vulnerable groups in the towns of Ain Qazzam and Tenzawateen in Tamanrasset. It distributed 126 tons of various foodstuffs and 13 tons of mineral water to several public institutions.[d]

### *Other initiatives*

The WFP provided assistance to refugees during April-July 2020 that comprised food rations providing an average of 2,120 kcal/day. Saudi Arabia donated 350 tons of dates in July, which allowed WFP to distribute 103 per cent of the planned caloric value. It also provided food for the month of Ramadan, which included 250 grams of barley each to 19,096 households and 1 kg of roasted maize to 9,300 households registered under welfare programmes.[e]

To treat and prevent moderate-to-acute malnutrition and anaemia, WFP provided daily food boxes and fresh food vouchers to an average of 663 women and 8,000 pregnant and lactating women each month (April – July) as well as specialized nutritious food (100 grams) to children. It suspended school feeding programmes while partially continuing the complementary livelihood activities through April and May to support 176 refugee families to produce vegetables and trees as well as to support fish farms.[f]

WFP, together with the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children´s Fund (UNICEF) and local non-governmental organizations (NGOs) allocated $15 million to support food security and other sectors while governmental institutions and NGOs from France, Switzerland, Spain and Brazil provided monetary and other assistance for school feeding programmes, general food and other assistance.[g]

To support the distribution of fresh food vouchers to pregnant and nursing women, WFP donated one car to the Algerian Red Crescent and the Media Lina Roja Saharawi refugee organization.

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a Food and Agriculture Organization (FAO), n. d.b.
b The Day, 2020; Reuters, 2020; and International Monetary Fund (IMF), 2020.
c Le Portail du Premier Ministère, 2020.
d Algeria Trade Ministry, 2020.
e WFP, 2020b.
f WFP, 2020c.
g WFP, 2020d.
h WFP, 2020e.

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