



# Arab food security monitoring framework

## Country reviews

**Morocco**

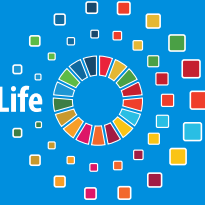


Shared Prosperity **Dignified Life**





Shared Prosperity **Dignified Life**



## **VISION**

ESCWA, an innovative catalyst for a stable, just and flourishing Arab region

## **MISSION**

Committed to the 2030 Agenda, ESCWA's passionate team produces innovative knowledge, fosters regional consensus and delivers transformational policy advice. Together, we work for a sustainable future for all.



# Arab food security monitoring framework

## Country reviews

### **Morocco**



© 2021 United Nations  
All rights reserved worldwide

Photocopies and reproductions of excerpts are allowed with proper credits.

All queries on rights and licenses, including subsidiary rights, should be addressed to the United Nations Economic and Social Commission for Western Asia (ESCWA), e-mail: [publications-escwa@un.org](mailto:publications-escwa@un.org).

The findings, interpretations and conclusions expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations or its officials or Member States.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Links contained in this publication are provided for the convenience of the reader and are correct at the time of issue. The United Nations takes no responsibility for the continued accuracy of that information or for the content of any external website.

References have, wherever possible, been verified.

Mention of commercial names and products does not imply the endorsement of the United Nations.

References to dollars (\$) are to United States dollars, unless otherwise stated.

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

United Nations publication issued by ESCWA, United Nations House, Riad El Solh Square, P.O. Box: 11-8575, Beirut, Lebanon.

Website: [www.unescwa.org](http://www.unescwa.org)

**Photo Credit:**  
Cover: ©iStock



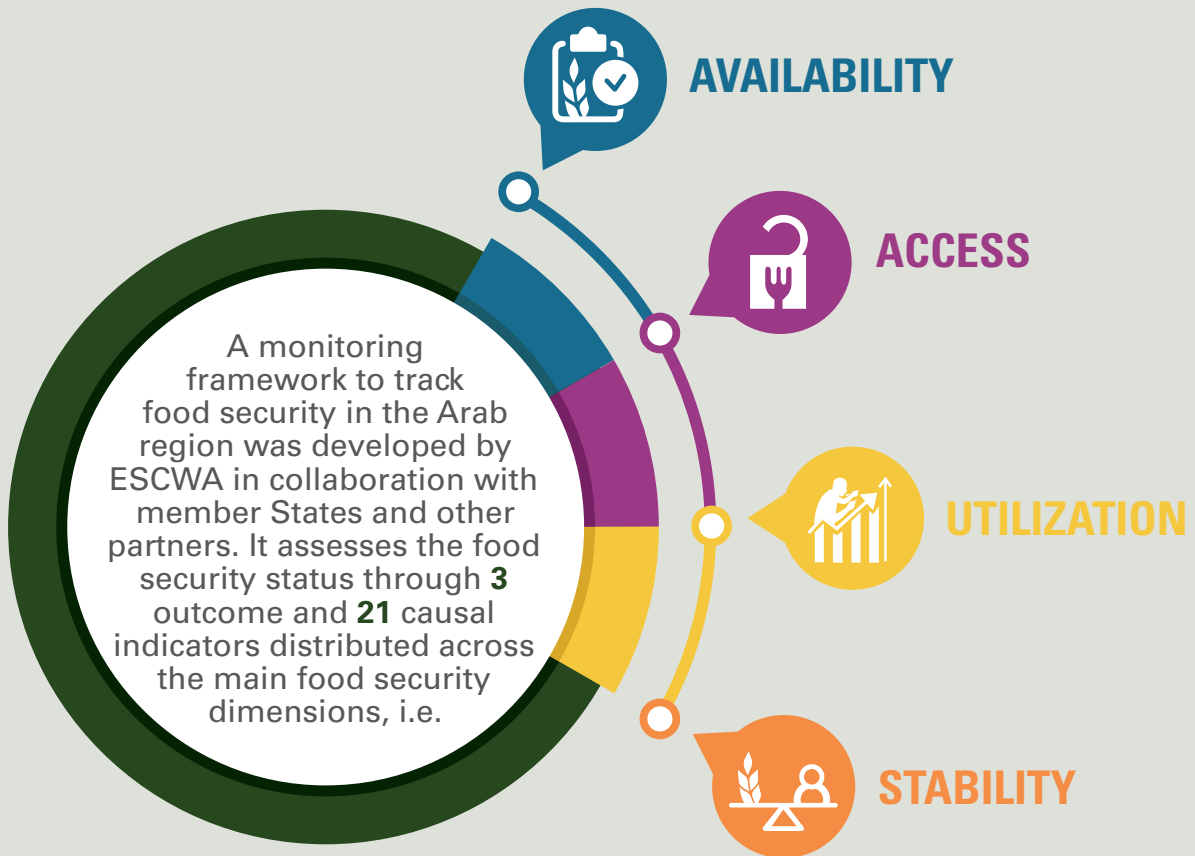


# Contents

 <b>Introduction</b>	<b>5</b>
 <b>Food security dashboard - Arab region</b>	<b>10</b>
 <b>Food security indicators, world vs. Arab region</b>	<b>11</b>
 <b>Country background</b>	<b>12</b>
A. Natural resources	12
B. Socioeconomy	13
C. Agriculture and food security	13
 <b>Data and trends</b>	<b>14</b>
A. Core indicators	14
B. Availability	14
C. Access	15
D. Utilization	15
E. Stability	15
 <b>Food security dashboard</b>	<b>16</b>
 <b>Food security indicators, Morocco</b>	<b>17</b>
 <b>Food security snapshot</b>	<b>18</b>
A. Drivers and determinants	18
B. Action areas	18
 <b>Impact of COVID-19</b>	<b>19</b>
 <b>References</b>	<b>21</b>



## Key Messages



The framework highlights that rates of obesity are high in Morocco, as are rates of child stunting. The lack of adequate data for food security monitoring is an issue. The country profile reviews the impact of COVID-19, early measures against it and their effect on the food situation.



**OBESITY**



**CHILD STUNTING**



# 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.

---

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);

<b>1 Core Indicators (CO)</b>			
<b>Code</b>	<b>Indicator description</b>	<b>Short name</b>	<b>SDG linkage</b>
<b>C01</b>	Prevalence of undernourishment <sup>R</sup> %	Undernourishment	2.1.1
<b>C02</b>	Prevalence of moderate or severe food insecurity measured using FIES <sup>R</sup> %	Food insecurity	2.1.2
<b>C03</b>	Prevalence of obesity in the adult population (18 years and older) <sup>R</sup> %	Obesity	

<sup>R</sup> : 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) <sup>R</sup> %	Food loss	12.3
<b>AV4</b>	Average dietary energy supply adequacy - %	Dietary energy supply	
<b>AV5</b>	Wheat import dependency ratio <sup>R</sup> %	Import dependency	
<b>AV6</b>	Share of water resources used in agriculture out of total renewable water resources <sup>R</sup> %	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 <sup>R</sup> %	Poverty	1.1.1/1.2.1/1.2.2
AC2	Share of food consumption expenditure in total household consumption expenditure <sup>R</sup> %	Food consumption	
AC3	Unemployment rate <sup>R</sup> %	Unemployment	8.5.2
AC4	Logistics performance - index	Logistics	
AC5	Inflation, consumer prices <sup>R</sup> %	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 <sup>R</sup> %	Child stunting	2.2.1
UT4	Children under 5 years of age affected by wasting <sup>R</sup> %	Child wasting	2.2.2
UT5	Anaemia among women of reproductive age (15-49 years) <sup>R</sup> %	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 <sup>R</sup>	Climate change	
ST2	Food price anomalies standard deviation <sup>R</sup>	Price anomalies	2.c.1
ST3	Political stability and absence of violence - ranking	Political stability	
ST4	Per capita food production variability - \$1,000/capita <sup>R</sup>	Production variability	
ST5	Per capita food supply variability - kcal/capita/day <sup>R</sup>	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

---

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>.



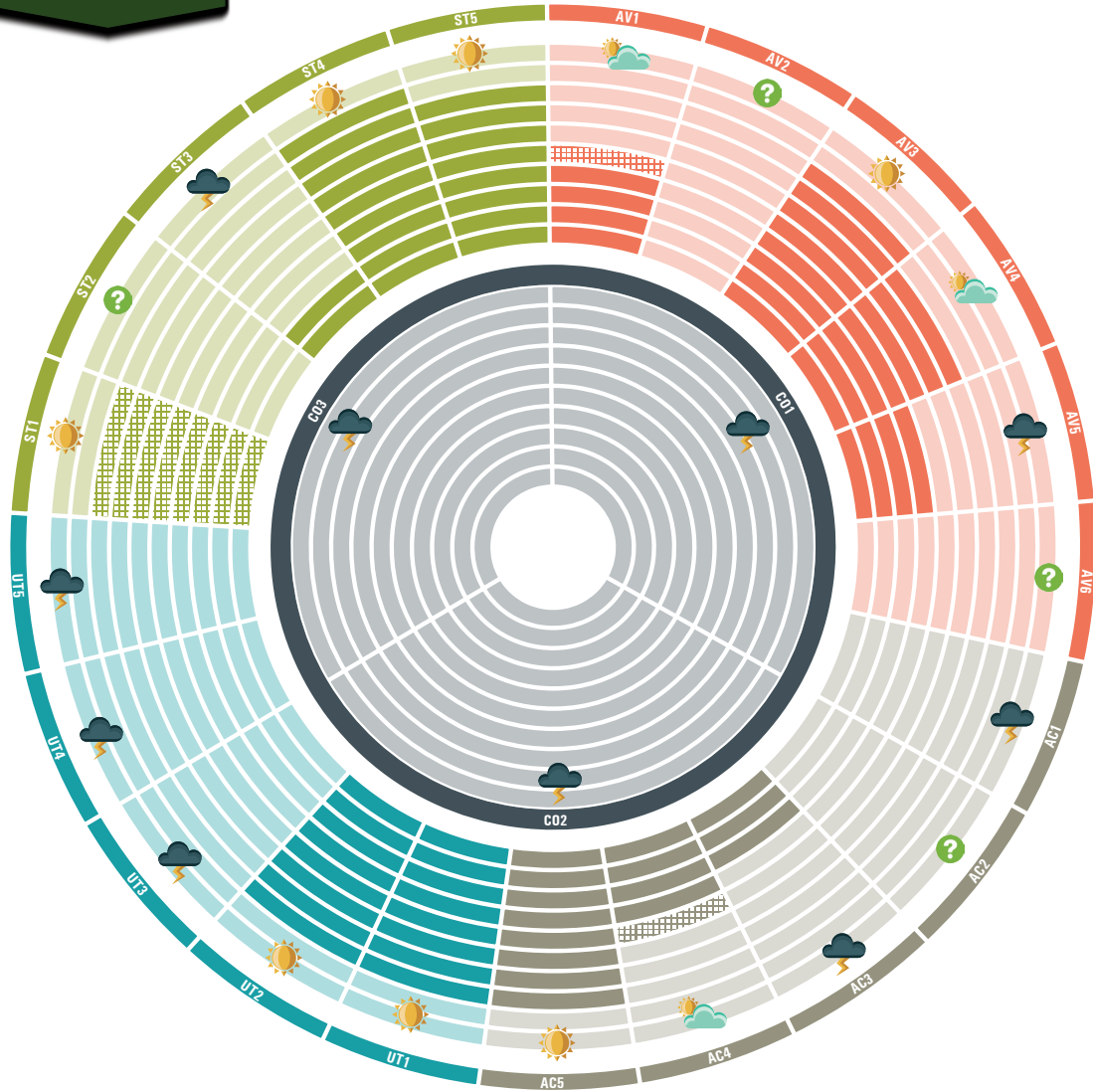
to follow up on progress achieved towards the implementation of selected SDGs. It should further enhance capacity at country level and support efforts of national experts to collect focused data, analyse them using a dedicated framework and interpret meaningfully the results to provide policymakers with 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

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

<sup>R</sup> : 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 Atlantic part of Morocco houses most of the arable land including the agricultural heart of the Gharb plain. The mountains have rainfall and snow, which feed an

extensive network of streams that allow irrigated agriculture; with less than 1000m<sup>3</sup>/capita/year, however, Morocco is a water-scarce country.<sup>1</sup>

### **Box 1. Agriculture for the poor: a strategy to improve food security**

Agriculture can offer a way to overcome food insecurity in rural areas by boosting smallholder incomes and improving their access to food.

Agriculture is also the main employer of women, who work at the low end of the value chain, and whose pay is lower than that of men, and often non-existent when offered as family labour. It is estimated that women own 7 per cent of the land but provide 30 per cent of the labour in family farms. Thus, the adoption of environmentally conserving innovative agriculture aimed at the smallholder may offer a way to improve incomes, especially when associated with social policies favouring gender-equitable enterprises.

Current farming practices are often environmentally destructive with overuse of agrochemical inputs. Irrigation efficiency is also of concern, especially where water is scarce and droughts recurrent. The Green Morocco Plan (2008-2020) was adopted by the State in order to improve food security, promoted, among others, the expansion of irrigation and pastureland management, which supported economic growth and tackled structural inequalities.

**Source:** Food from Morocco, n.d.

---

<sup>1</sup> Barbour and others, 2019; and Food and Agriculture Organization (FAO), n. d.a.

## B. Socioeconomy

---

Morocco is a lower-middle-income country; its gross domestic product (GDP), in 2018, was approximately \$118 billion corresponding to a per capita GDP of roughly \$3,200.<sup>2</sup> The contribution of agriculture to GDP stood at 13.6 per cent in 2016 and declined to 13 per cent in 2019.<sup>3</sup>

Nearly 35 per cent of its 36.5 million inhabitants are rural, of which 80 per cent depend directly or indirectly on agriculture for their livelihood. Morocco's economic growth was important in addressing extreme poverty. Yet, poverty remains a challenge for nearly 10 per cent of the rural population.<sup>4</sup>

## C. Agriculture and food security

---

Agriculture in Morocco follows a pronounced bifurcation in economic patterns, with 75 per cent of the land used for capital-intensive farming destined for export, while the rest of the land, which is cultivated by 70 per cent of the farmers working less than 5 ha each, is mainly used for small-scale production and subsistence. Much of the agricultural production is rain-fed, and climate fluctuations expose the country to severe variability in production, making the country a net importer of cereals.<sup>5</sup>

Approximately 9.3 million people were moderately or severely food insecure during 2017-2019.<sup>6</sup> Recent reforms have contributed

to reducing hunger and food insecurity, and it is generally agreed that food is available for most of the population. However, there are still issues with diets and food quality, which underlie the malnutrition that is currently experienced in the form of a double burden of undernutrition and overweight, which affects more than 50 per cent of the population. Women are especially impacted, particularly in poor families. Similarly, stunting among children is still widespread, and has been associated with undernutrition in pregnant women and girls. These issues underscore an aspect of food insecurity that requires immediate action.<sup>7</sup>

---

2 World Bank, n. d.

3 Ibid.

4 Ibid.

5 WFP, 2019.

6 FAO and others, 2020.

7 WFP, 2019.





## Data and trends

### A. Core indicators

---

- **Prevalence of undernourishment (CO1)** reported officially at 0.1 per cent in 2014, a substantial decrease from 4.6 per cent in 1985, which is an indication of excellent progress;
- **Prevalence of severe food insecurity (CO2)** official data are not available;
- **Prevalence of adult obesity (CO3)**, as reported by official country sources, increased from 11.9 per cent in 2011 to 20 per cent in 2017, which is still lower than the Arab regional average of 28.4 per cent. For the same year, female obesity stood at 32.2 per cent whereas male obesity registered at 19.4 per cent according to internationally sourced data.<sup>8</sup>

### B. Availability

---

- **Wheat yield to potential (AV1)** data do not exist, according to official data sources. Mueller and others estimated the potentially achievable yield at 4.1 tons/ha;<sup>9</sup>
- **Agricultural orientation index (AV2)** data reported by the country were relatively low in both 2013 and 2017, at 0.3 and 0.4, respectively. It is noteworthy that Morocco's agricultural sector brings 13 per cent of added value to GDP;
- **Food losses to food available (AV3)** data for 2010 are not available. Country sources report cereal losses in 2016 at 35 per cent. Food losses are estimated for one subset of crops only;
- **Average dietary energy supply adequacy (AV4)** data are considered unavailable as official sources provided them in caloric terms only as 2605.5 and 2828.1 kcal/day/capita in 1985 and 2001;
- **Wheat import dependency (AV5)** official data show that the dependency on wheat import was approximately 52 per cent in 2014, which is below the regional average of 65 per cent;
- **Water resources used in agriculture (AV6)**, according to national data, was at 90 per cent in 2018. Considering the country's already scarce water resources (811.4 m<sup>3</sup>/capita/year) and its low investment in agriculture along with the sector's relatively small contribution to GDP, this value reflects an unsustainable practice.

---

<sup>8</sup> World Bank, n. d.

<sup>9</sup> Mueller and others, 2012.





## C. Access

---

- **Poverty ratio at \$3.2/day (AC1)** affected 4.8 per cent of the population in 2014, well below the Arab regional average of 16.6 per cent, according to national official sources;
- **Food consumption share of expenditures (AC2)** was 37 per cent in 2014 based on official data indicating that the population had sufficient disposable income to spend on non-food items;
- **Unemployment rate (AC3)** remained stable at around 9 per cent between 2015 and 2018 according to national data. International secondary sources show that, in 2010, female unemployment was at 10.35 per cent and male unemployment at 8.62 per cent;<sup>10</sup>
- **Logistical performance (AC4)** official data are not available;
- **Inflation, consumer prices (AC5)** was slightly low in 2018 at 1.9 per cent, compared to 0.9 per cent in 2010, as reported by the country's official sources. Very low inflation rates might hinder economic growth while negative rates could lead to a deflation.

## D. Utilization

---

- **Population using basic drinking water services (UT1)** reached 93 per cent of the population in 2018 based on official sources. The country might be able to achieve Sustainable Development Goal (SDG)s 6, target 1, by 2030; below the "low prevalence of malnutrition" classification according to the World Health Organization (WHO); however, the rate was higher than the 2030 target of the World Health Assembly (WHA);<sup>11</sup>
- **Population using basic sanitation services (UT2)** reached 96.9 per cent in 2018 based on official data, putting it on a path to achieve the related SDG target by 2030;
- **Stunting in children under five years (UT3)** was at 15.1 per cent in 2018, which was
- **Wasting in children under five years (UT4)** was 2.6 per cent in 2018 putting the country in the "low prevalence of malnutrition" classification of WHO but are still above the 2030 target of WHA;<sup>12</sup>
- **Prevalence of anaemia among women (UT5)** official data are not available.

## E. Stability

---

- **Climate change vulnerability (ST1)** had a low score (0.09) in 2019, indicating that the country is not likely to be significantly affected by the impact of climate change on the three factors of weather-related disasters, agriculture productivity and sea-level rise;
- **Food price anomalies (ST2)** registered a negative value for 2017 (-0.7), which is an

---

10 World Bank, n. d.

11 FAO and others, 2019.

12 Ibid.



indication that there is no major swing in food prices that might affect food security;

- **Political stability (ST3)** official data are not available;

- **Food production variability (ST4)** official data are not available;

- **Food supply variability (ST5)** official data are not available.

## Food security dashboard



## Food security indicators, Morocco

Indicators		Arab		Morocco			Trend
		Latest		2010	Latest		
Code	Description	Value	Year	Value	Value	Year	
<b>CORE INDICATORS</b>							
CO1	Undernourishment <sup>R</sup> %	12.1	2016	n.a.	0.1	2014	
CO2	Food insecurity <sup>R</sup> %	12.2	2016	n.a.	n.a.		
CO3	Obesity <sup>R</sup> %	28.4	2016	n.a.	20.0	2017	
<b>AVAILABILITY INDICATORS</b>							
AV1	Wheat yields - %	82.2	2017	n.a.	n.a.		
AV2	Agriculture expenditure - index	n.a.		n.a.	0.40	2017	
AV3	Food loss <sup>R</sup> %	6.8	2013	n.a.	35.0	2016	
AV4	Dietary energy supply - %	131	2017	n.a.	n.a.		
AV5	Wheat Import dependency <sup>R</sup> %	65.0	2012	n.a.	52.6	2014	
AV6	Agriculture water <sup>R</sup> %	n.a.		n.a.	90.0	2018	
<b>ACCESS INDICATORS</b>							
AC1	Poverty <sup>R</sup> %	16.6	mult.	n.a.	4.8	2014	
AC2	Food consumption <sup>R</sup> %	n.a.		n.a.	37.0	2014	
AC3	Unemployment <sup>R</sup> %	10.4	mult.	n.a.	9.5	2018	
AC4	Logistics - index	2.7	2016	n.a.	n.a.		
AC5	Inflation <sup>R</sup> %	12.8	mult.	0.9	1.9	2018	●
<b>UTILIZATION INDICATORS</b>							
UT1	Drinking water access - %	86.9	2015	n.a.	93.0	2018	
UT2	Sanitation access - %	80.8	2015	n.a.	96.9	2018	
UT3	Child stunting <sup>R</sup> %	22.9	mult.	n.a.	15.1	2018	
UT4	Child wasting <sup>R</sup> %	8.7	mult.	n.a.	2.6	2018	
UT5	Women anaemia <sup>R</sup> %	35.5	2016	n.a.	n.a.		
<b>STABILITY INDICATORS</b>							
ST1	Climate change <sup>R</sup> - index	0.1	2019	n.a.	0.09	2019	
ST2	Price Anomalies <sup>R</sup> - index	n.a.		n.a.	-0.7	2017	
ST3	Political stability - ranking	14	2017	n.a.	n.a.		
ST4	Production variability <sup>R</sup> - \$1,000/capita	10.1	2016	n.a.	n.a.		
ST5	Supply variability <sup>R</sup> - kcal/cap/day	29.8	2013	n.a.	n.a.		

<sup>R</sup> : 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 the table are from national sources except for ST1 and ST2.





# Food security snapshot

## A. Drivers and determinants

---

The framework shows that the food security situation in Morocco is mixed as undernourishment (CO1) is not a major issue while food insecurity experience (CO2) lacks data and obesity (CO3) levels are alarming.

### Hotspot areas include the following:

- **Availability:** agriculture orientation (AV2) and water use in agriculture (AV6);
- **Access:** logistics (AC4);
- **Utilization:** stunting (UT3) and wasting (UT4) among children.

As depicted above, data availability and data sharing are challenges that need to be addressed in order to fully take advantage of the results of the framework.

Morocco's progress on achieving food security can be seen in its core indicators, especially CO1. Today, food insecurity is caused by the double burden of undernutrition of the poor, rural and vulnerable segments of the population (mainly women and children) coupled with overconsumption of food and obesity.

## B. Action areas

---

Morocco's indicators have all shown progress, but efforts must be placed on improving the following:

1. The sustainability of the livelihoods of smallholders, who are also the poorest and the most food insecure (see box 1). Evaluating the achievements of the Green Morocco Plan will help in the analysis of any gaps and guide towards focused actions.
2. The productivity of rain-fed cereal production and the integration of

pastoralism within the extensive cereal farming systems.

3. Diets and dietary guidelines as the current stress on health appears to be related to the overconsumption of foods of poor nutritional value.
4. The access to clean water and sanitation as a precursor of improving health and nutrition in poor rural areas.



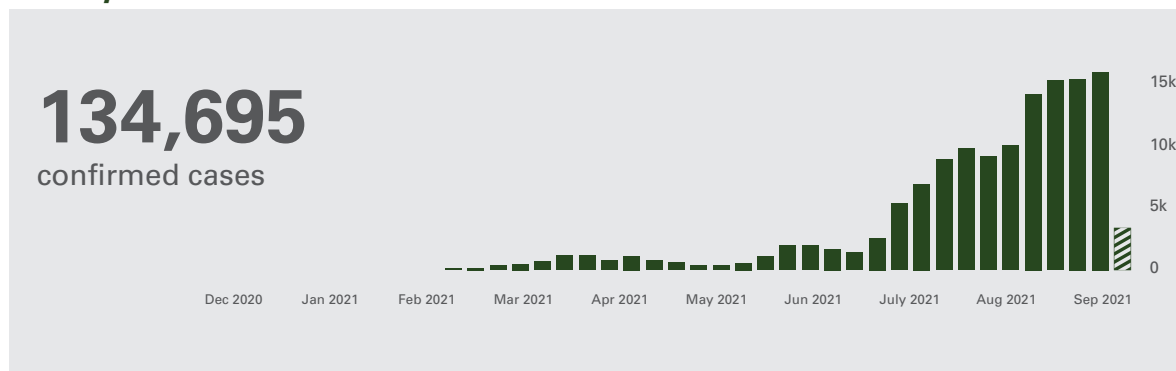


# Impact of COVID-19

The COVID-19 pandemic reached Morocco in early March 2020 and, by October, had affected more than 130,000 people with more than

2,300 deaths recorded. Numbers of reported cases are still following an increasing trend reaching their highest peak in late September.

## Weekly cases



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

Unemployment is expected to increase because of the pandemic and subsequent quarantine measures.<sup>13</sup> The unemployment rate increased year-over-year from 9.1 per cent to 10.5 per cent compared to March 2019.<sup>14</sup> Because of the crisis, 300,000 Moroccans are estimated to fall into poverty.<sup>15</sup> Food production is expected to be less than last year's due to unfavourable weather. Morocco is expected to import more wheat by 2021.<sup>16</sup> Even though production is not anticipated to be much affected by the

COVID-19 pandemic, food supply could suffer if trade restrictions were to be expanded. This has led Morocco to increase its grain reserves and to suspend custom duties on a number of key food products to mitigate inflation particularly in the crucial month of Ramadan.<sup>17</sup>

To safeguard the availability of agricultural and food products at the market, the Government maintained normal agricultural activity and production during the health

<sup>13</sup> Closure of schools and cafes and suspension of all international flights.

<sup>14</sup> Xinhua, 2020.

<sup>15</sup> UNDP, UNECA and World Bank, 2020.

<sup>16</sup> FAO, n. d.c.

<sup>17</sup> Ibid.



emergency containment state by sustaining normal rates of production, packaging, transfer, and distribution of goods.<sup>18</sup> Morocco is aiming to ensure availability of wheat stock up to 900,000 tons of soft wheat by the end of 2020.<sup>19</sup>

The COVID-19 pandemic fears of food shortage and panic buying led to a surge in the price of pulses in April 2020. For example, the price of chickpeas increased by 3 per cent and that of dry beans by 8 per

cent. The interministerial committee reported 768 breaches of food quality and prices during March 2020.<sup>20</sup>

Through actions taken to stabilize food security, the country was able to maintain food stability, at least to this date. This was made easier by the prevailing low world food prices and the relatively limited impact of the pandemic on the country compared to other locations worldwide.

## Box 2. Examples of initiatives

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

An interministerial committee conducted weekly meetings to track and prevent fraud related to food supply and food prices. The committee reported a decrease in the price of vegetables despite a high demand. The prices of tomatoes, potatoes, carrots, green onions and dry onions decreased by 7 per cent, 5 per cent, 4 per cent, 8 per cent and 5.5 per cent, respectively. The prices of red and white meat did not change.<sup>a</sup>

The Government halted custom duties on dried beans, beans, lentils, chickpeas and wheat in April and extended it until December 2020 in an attempt to keep prices steady.<sup>b</sup>

The Government, through 50-100 mobile agencies that belong to Crédit Agricole du Maroc Group, delivered financial aid to those living in remote rural areas to ease the adverse economic impacts of the virus.<sup>c</sup>

### ***Other initiatives***

The French Development Agency provided Crédit Agricole du Maroc with \$33 million as a partly early payment of the \$54 million credit line, to ease the access of Moroccan micro-, small, and medium-sized businesses to financing during the bad conditions caused by the virus and to support both agricultural and agroindustrial sectors.<sup>d</sup>

---

a Morocco World News, 2020c.

b International Trade Center, 2020. Market Access Map.

c AgriMaroc, 2020a.

d Morocco World News, 2020d.

---

18 Asharq al-Awsat, 2020.

19 Morocco World News, 2020a.

20 Morocco World News, 2020b.





## References

- AgriMaroc (2020a). Le Crédit Agricole déploie 50 agences mobiles pour les aides financières en milieu rural (April 24). Available at <https://www.agrimaroc.ma/credit-agricole-aides-financieres/> (accessed September 7, 2020).
- \_\_\_\_\_ (2020b). Bayer Maroc donne 3 millions de dirhams contre le Covid-19. Available at <https://www.agrimaroc.ma/bayer-maroc-covid-19/> (accessed September 7, 2020).
- Asharq al-Awsat (2020). Morocco: Agricultural Activity, Production to Continue Despite Coronavirus. Available at <https://english.aawsat.com/home/article/2214666/morocco-agricultural-activity-production-continue-despite-coronavirus> (accessed September 7, 2020).
- Barbour, N. and others (2019). Morocco. Encyclopedia Britannica. Available at <https://www.britannica.com/place/Morocco> (accessed April 2020).
- Food and Agriculture Organization (FAO) (n. d. a). AQUASTAT. Available at <http://www.fao.org/nr/water/aquastat/data/query/index.html?lang=en> (accessed April 2020).
- \_\_\_\_\_ (n. d. b). Global Information and Early Warning System (GIEWS). Country Briefs – Morocco. Available at <http://www.fao.org/giews/countrybrief/index.jsp> (accessed April 2020).
- \_\_\_\_\_ (n. d. c). Country Briefs– Morocco. Available at <http://www.fao.org/giews/countrybrief/country.jsp?code=MAR> (accessed September 7, 2020).
- \_\_\_\_\_ (2019). 2018 Near East and North Africa Regional Overview of Food Security and Nutrition: Rural Transformation – Key for Sustainable Development in the Near East and North Africa. Cairo. Available at <http://www.fao.org/documents/card/en/c/ca3817en>.
- FAO and others (2019). The State of Food Security and Nutrition in the World 2019: 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. Available at <http://www.fao.org/3/ca9692en/CA9692EN.pdf> (accessed September, 2020).
- Food from Morocco (n. d.). Agricultural sector. Available at <http://www.foodfrommorocco.ma/en/secteur-agricole/overview> (accessed May 2020).
- International Trade Center (2020). Market Access Map. Available at <https://www.macmap.org/covid19> (accessed September 7, 2020).
- Morocoworldnews (2020a). Morocco Suspends Customs Duties on Wheat Beyond June 15. Available at <https://www.morocoworldnews.com/2020/05/301897/morocco-suspends-customs-duties-on-wheat-beyond-june-15/> (accessed September 7, 2020).
- \_\_\_\_\_ (2020b). Morocco Reassures Citizens After Dry Bean, Chickpea Prices Increased. Available at <https://www.morocoworldnews.com/2020/04/298241/morocco-reassures-citizens-after-dry-bean-chickpea-prices-increased/> (accessed September 7, 2020).
- \_\_\_\_\_ (2020c). Credit Agricole Secures \$54 Million Loan to Support Moroccan Agriculture. Available at <https://www.morocoworldnews.com/2020/04/299794/credit-agricole-secures-54-million-loan-to-support-moroccan-agriculture/> (accessed September 7, 2020).
- \_\_\_\_\_ (2020d). Morocco Reports Decline in Vegetable Prices, Assures of Adequate Supply. Available at <https://www.morocoworldnews.com/2020/04/299494/morocco-reports-decline-in-vegetable-prices-assures-of-adequate-supply/> (accessed September 7, 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>.
- United Nations Development Programme (UNDP), Economic Commission for Africa (ECA) and World Bank (2020). Social and economic impact of the COVID-19 crisis in Morocco. Available at [https://mediafra.admiralcloud.com/customer\\_609/b06bc300-5cfe-4af8-9a20-](https://mediafra.admiralcloud.com/customer_609/b06bc300-5cfe-4af8-9a20-)



15a5c1b04514?response-content-disposition=inline%3B%20filename%3DEconomic\_and\_Social\_Impact\_of\_COVID\_19\_Morocco\_UN\_Impact\_Assessment.pdf-2.pdf.pdf&Expires=1619642999&Key-Pair-Id=APKAI2N3YMVS7R4AXMPQ&Signature=JYUM77BzZGbli6fas-ksOFCLH7gD0xlnpRW9nXH8fTLlpfTZ5sAsKx3n9Gxmi92oFdgDf7RZz8X9nrBnvYhLTGfQbKhLrY8l9vxmRyFB4T7YJyjabPTgbleqUSEv-iOM7zxoEzSyeWEV0-JgkXP5gfJphxRsJUu6Z6lJScqxGnz4jkkYsAP8ZqGfs2uHSh1lHwKfJ6nUXFPCa~bpTWQa8~G2X~uxrp3gaf3xKASqAjxr00281bJH6HjX4lxiA7JxUV8s~Rv-PHBoMHD0VRMTvV40TzdG55p17bEKiUgnyZ0VUXkL3qMe2olQZ1ez6hQwQV7gXDUGPm7fWYwLEX1kw\_\_.

World Food Programme (WFP) (2019). Morocco Country Strategic Plan (2019-2021). WFP Executive Board, WFP/EB.A/2019/8-A/8/Rev.1. Available at <https://www.wfp.org/operations/ma02-morocco-country-strategic-plan-2019-2021>.

World Health Organization (WHO) (n. d.). COVID-19 dashboard. Available at <https://covid19.who.int/region/emro/country/ma> (accessed October 6, 2020).

World Bank (n. d.). Indicators. Available at <https://data.worldbank.org/indicator> (accessed April 2020).

Xinhua (2020). "Morocco's unemployment rate up to 10.5 pct in Q1 - Xinhua | English.news.cn." [http://www.xinhuanet.com/english/africa/2020-05/07/c\\_139036105.htm](http://www.xinhuanet.com/english/africa/2020-05/07/c_139036105.htm) (accessed Sep. 07, 2020).







