



Arab food security monitoring framework

Country reviews

The United Arab Emirates

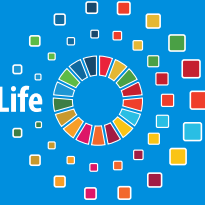


Shared Prosperity **Dignified Life**





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

The United Arab Emirates



© 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.

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

Photo Credit:
Cover: ©iStock



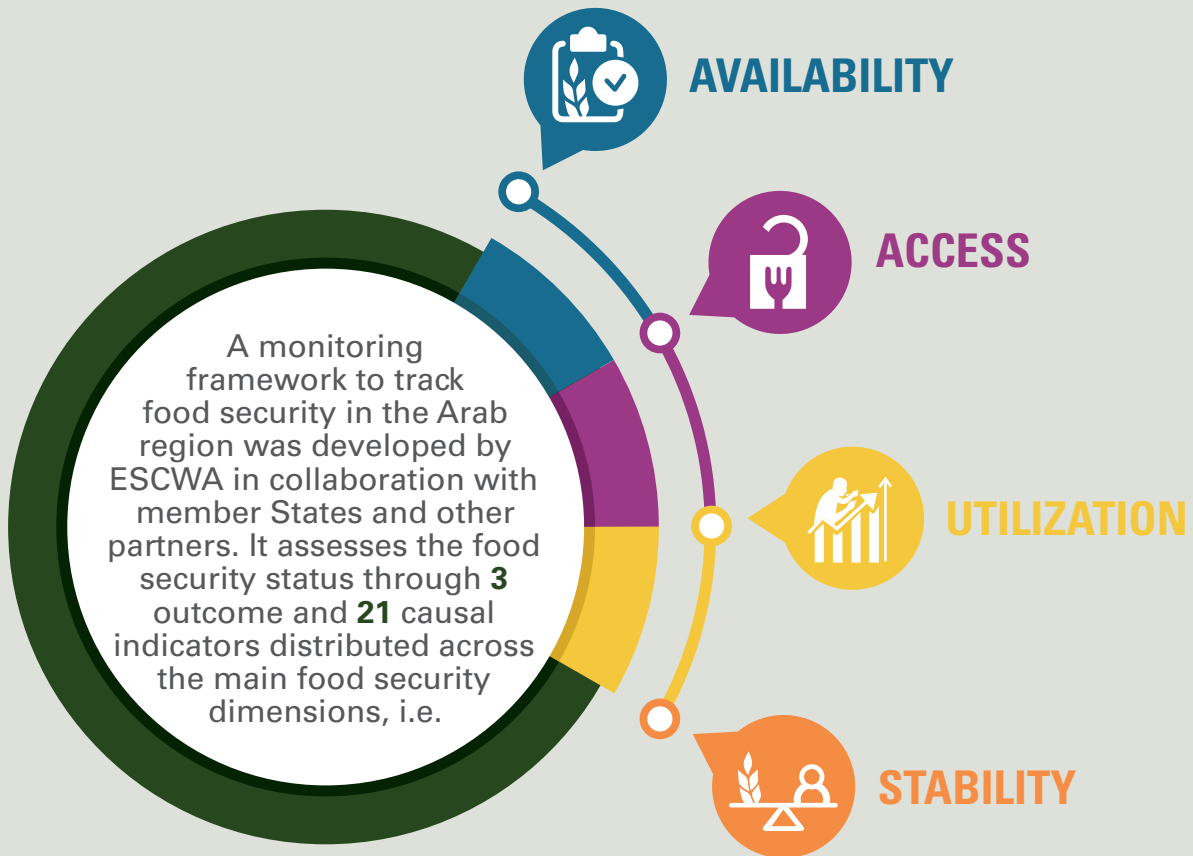


Contents

 Introduction	5
 Food security dashboard - Arab region	10
 Food security indicators, world vs. Arab region	11
 Country background	12
A. Natural resources	12
B. Socioeconomy	13
C. Agriculture and food security	13
 Data and trends	14
A. Core indicators	14
B. Availability	14
C. Access	15
D. Utilization	15
E. Stability	16
 Food security dashboard	17
 Food security indicators, The United Arab Emirates	18
 Food security snapshot	19
A. Drivers and determinants	19
B. Action areas	19
 Impact of COVID-19	20
 References	22



Key Messages



The monitoring framework shows that food security in the United Arab Emirates is not a concern though the country faces rising rates of obesity. Anaemia among women is high, and dependency on food imports amid food waste is a concern. The country profile reviews the impact of COVID-19, early measures against it and their effect on the food situation.



OBESITY



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
C01	Prevalence of undernourishment ^R %	Undernourishment	2.1.1
C02	Prevalence of moderate or severe food insecurity measured using FIES ^R %	Food insecurity	2.1.2
C03	Prevalence of obesity in the adult population (18 years and older) ^R %	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;

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) ^R %	Food loss	12.3
AV4	Average dietary energy supply adequacy - %	Dietary energy supply	
AV5	Wheat import dependency ratio ^R %	Import dependency	
AV6	Share of water resources used in agriculture out of total renewable water resources ^R %	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 website³ 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 Tunis⁵ and Beirut⁶ 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>.



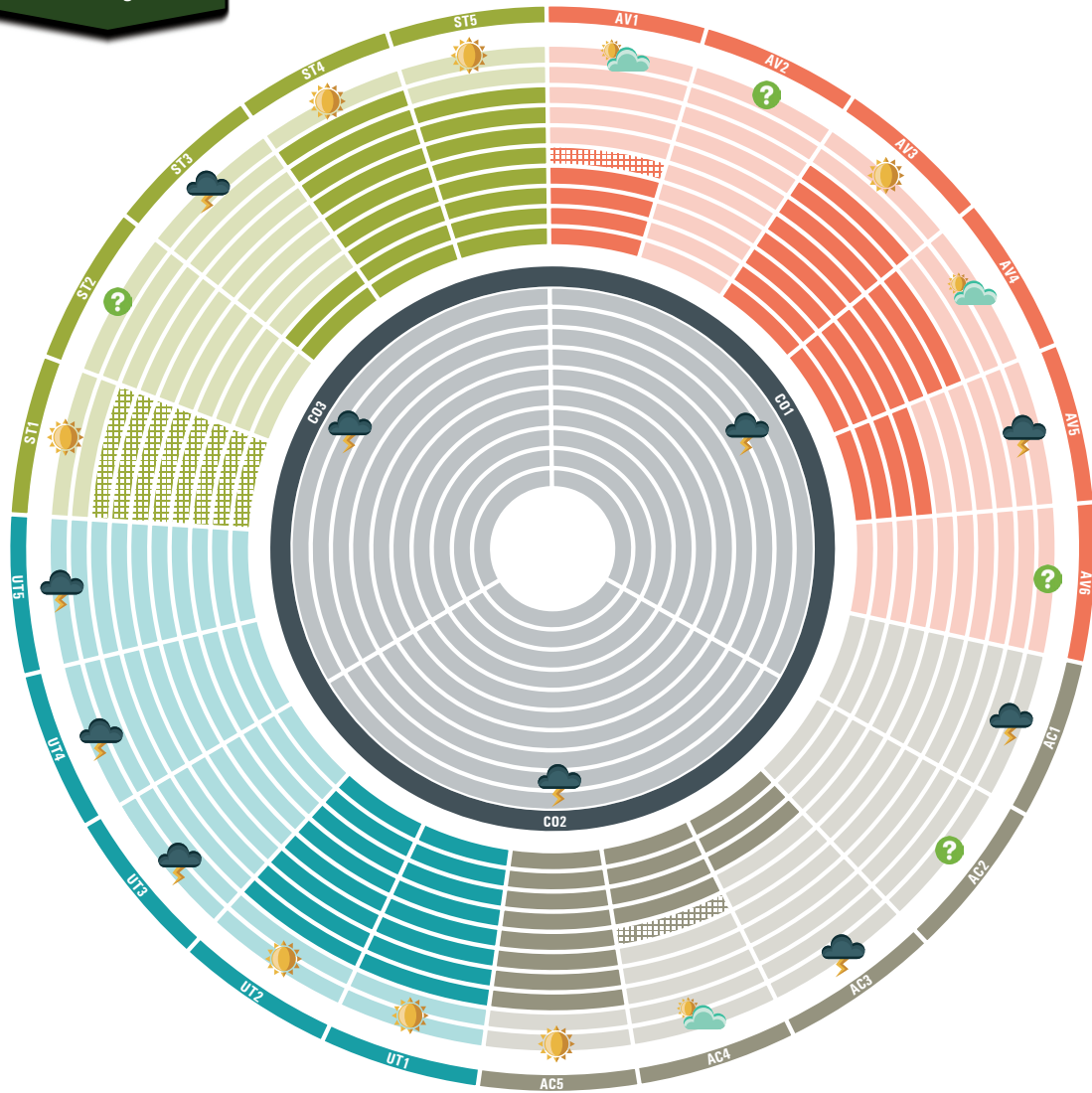
to follow up on progress achieved towards the implementation of selected SDGs. It should further enhance capacity at country level and support efforts of national experts to collect focused data, analyse them using a dedicated framework and interpret meaningfully the results to provide policymakers with 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			Trend
		Latest		2010	Latest		
Code	Description	Value	Year	Value	Value	Year	
CORE INDICATORS							
CO1	Undernourishment ^R %	10.8	2016	11.5	12.1	2016	●
CO2	Food insecurity ^R %	9.2	2018	n.a.	12.2	2016	
CO3	Obesity ^R %	13.0	2016	24.6	28.4	2016	●
AVAILABILITY INDICATORS							
AV1	Wheat yields - %	n.a.		76.5	82.2	2017	●
AV2	Agriculture expenditure - index	n.a.		n.a.	n.a.		
AV3	Food loss ^R %	n.a.		7.3	6.8	2013	●
AV4	Dietary energy supply - %	n.a.		131	131	2017	●
AV5	Wheat Import dependency ^R %	n.a.		62.5	65.0	2012	●
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.	●
AC4	Logistics - index	2.8	2016	2.6	2.7	2016	●
AC5	Inflation ^R %	2.5	2018	5.7	12.8	mult.	●
UTILIZATION INDICATORS							
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 ^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	●
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	●
ST4	Production variability ^R - \$1,000/capita	n.a.		10.3	10.1	2016	●
ST5	Supply variability ^R - kcal/cap/day	n.a.		32.8	29.8	2013	●

^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

The United Arab Emirates is a federation of seven emirates along the eastern coast of the Arabian Peninsula. The total area is about 83,600 km², of which 77,700 km² are the mainland surface area where the population lives. The country is dominated

by desert, which covers 80 per cent of the area, especially the western part, and has no perennial streams and natural bodies of surface water. Agriculture is practiced in oases including Al-Ain, the largest of them.¹

Box 1. A special focus on food security

The United Arab Emirates is the first Arab country to create a Ministry of Food Security and to appoint a women minister to the post. The country, which has near total reliance on food imports, is addressing its vulnerability to potential market volatilities and to its limited biophysical endowment by investing in trade and in high-tech. In a bid to become one of the most food secure nations in the world by 2021, the United Arab Emirates has recently launched a food security road map. The plan is based on five pillars, each addressing a specific limitation, as follows:

- Building a food data strategy;
- Developing an innovation research and development strategy;
- Establishing a national food waste programme;
- Expanding nutritional guidelines;
- Enhancing the regional trading environment.

Source: Bridges, 2019.

¹ Crystal, J.A., S.G. Miller and J.E. Peterson, 2020.



B. Socioeconomy

Expatriates make up 80 per cent of the 9.4 million inhabitants. A high population growth rate coupled with a growing affluence and a nutritional transition geared towards more meat consumption are resulting in increased and unsustainable food demand. With a gross domestic product (GDP) of \$414 billion corresponding to a per capita GDP of about \$43,000 in 2018, the United Arab Emirates is among the richest economies in the world.² However, it is overreliant on a single source of income, namely, fossil fuels.³

The country is food secure largely due to its oil and gas wealth, and its relatively

striving economy while it also enjoys political stability.⁴ It has recently established a Ministry of Food Security, indicating the importance the country is devoting to the issue. In addition, it is actively engaged in planning for a post-oil economy by investing and strengthening new sectors including tourism. These developments are bound to increase food demand and food-price inflation. Consumption was growing at 12 per cent per year in 2017, and the value of food imports was expected to reach \$8.4 billion in 2020.⁵

C. Agriculture and food security

Agriculture and food production are limited due to the prevalent biophysical conditions. The food self-sufficiency ratio is 2 per cent for cereals, 26 per cent for meats and 21 per cent for fruits and vegetables (2011-2013).⁶ Although the United Arab Emirates has been

exploring unconventional approaches to food production such as saline agriculture, vertical farming or overseas investments, it is expected to remain largely reliant on food imports.

2 World Bank, n. d.

3 Bailey, R., 2013.

4 Fischbach, T., 2018.

5 Swan, M. 2017.

6 Food and Agriculture Organization (FAO), n. d.a.





Data and trends

A. Core indicators

- **Prevalence of undernourishment (CO1)** showed a good progress between 2010 and 2016 as it decreased from 5.9 per cent to 2.5 per cent, respectively. This value is lower than the Arab region average (12.1 per cent);
- **Prevalence of severe food insecurity (CO2)** in the United Arab Emirates was reported at 6.1 per cent in 2016, which is below the Arab regional average (12.2 per cent);
- **Prevalence of adult obesity (CO3)** increased from 27.7 per cent in 2010 to 31.7 per cent in 2016. This is higher than the Arab regional average (28.4 per cent).

B. Availability

- **Wheat yield to potential (AV1)** reached 71.5 per cent of the potential yield in 2017 or 3.3 tons/ha,⁷ with a potential of 4.65 tons/ha.⁸ The country has a low self-sufficiency ratio in cereals of 2 per cent, making this indicator poorly relevant notably as it is a high-income country;
- **Agriculture orientation index (AV2)** was 0.05 in 2015. The new minister of food security is set on enhancing new and innovative technologies to produce fresh foods through public investments;⁹
- **Food losses to food available (AV3)** amounted to 22.6 per cent in 2010 but decreased to 10.4 per cent in 2013. However, food waste is not included while it is consequential;
- **Average dietary energy supply adequacy (AV4)** increased from 117 per cent to 128 per cent between 2010 and 2017, respectively, indicating greater food availability;
- **Wheat import dependency (AV5)** stood at 83.5 per cent in 2010 and 100 per cent in 2012. The share of food imports to GDP was at 2 per cent, and the share of agriculture imports as a percentage of merchandise exports for 2011-2013 was

7 Ibid.

8 Mueller, N. D. and others, 2012.

9 Al Mheiri, 2019.



at 4 per cent. Food consumption is more likely to be limited by physical supplies availability than purchasing ability;

- **Water resources used in agriculture (AV6)** data are not available. Due to the very limited agricultural production, this indicator has little relevance to the country.

C. Access

- **Poverty ratio at \$3.2/day (AC1)** data are not available;
 - **Food consumption share of expenditures (AC2)** was recorded at 14.5 per cent in 2010 compared to 13.7 per cent in 2018. This is a low value and more reflective of that of other developed economies with high income;
 - **Unemployment rate (AC3)** was 2.7 per cent in 2010 and 2.6 per cent in 2018. Female unemployment was at 10 per cent while that of youths was at 12 per cent.¹⁰
- It must be pointed out, though, that the United Arab Emirates relies on foreign workers mostly;
- **Logistics performance (AC4)** is one of the highest in the world improving from 3.6 in 2010 to 4 in 2018 due to the development of its transport infrastructure and focus on trading efficiency;
 - **Inflation, consumer prices (AC5)** was at 0.88 per cent in 2010 and reached 3.1 per cent in 2018. It is among the lowest inflation rates in the Arab region.

D. Utilization

- **Population using basic drinking water services (UT1)** reached 98 per cent of the population in 2017;
- **Population using basic sanitation services (UT2)** reached 99 per cent of the population in 2017;
- **Stunting in children under five years (UT3)** data are not available;
- **Wasting in children under five years (UT4)** data are not available;
- **Prevalence of anaemia among women (UT5)** increased from 25.6 per cent in 2010 to 27.8 per cent in 2016. While a cause for concern, it is noteworthy that these rates are among the lowest in the Arab region.

¹⁰ FAO, 2019.



E. Stability

- **Climate change vulnerability (ST1)** is 0.04 indicating that the country will face little impact from climate change, as evaluated through weather-related disasters, sea-levels rise and loss of agricultural productivity;
- **Food price anomalies (ST2)** data are not available;
- **Political stability (ST3)** remains high despite its decrease from 73.9 in 2010 to 71 in 2018;
- **Food production variability (ST4)** was at \$11,000 in 2010 and increased to \$26,900 in 2016. Though this might indicate potential vulnerability, the country is not a major food producer as it lacks the necessary natural resources;
- **Food supply variability (ST5)** was at 17 kcal/capita/day in 2010 and dramatically increased to 61 kcal/capita/day in 2013. This fluctuation in food supply might be the result of an increase in food imports.



Food security dashboard

United Arab Emirates



2010 Data: ■ ■ ■ ■ ■ Latest Data: ■ ■ ■ ■ ■

Performance: ☀ High: Proceed Action | ☁ Average: More Action | ⚡ Low: Urgent Action | ❓ No Data



Food security indicators, United Arab Emirates

Indicators		Arab		UNITED ARAB EMIRATES			Trend
		Latest		2010	Latest		
Code	Description	Value	Year	Value	Value	Year	
CORE INDICATORS							
CO1	Undernourishment ^R %	12.1	2016	5.9	2.5	2016	●
CO2	Food insecurity ^R %	12.2	2016	n.a.	6.1	2016	
CO3	Obesity ^R %	28.4	2016	27.7	31.7	2016	●
AVAILABILITY INDICATORS							
AV1	Wheat yields - %	82.2	2017	127.3	71.5	2017	●
AV2	Agriculture expenditure - index	n.a.		n.a.	0.05	2015	
AV3	Food loss ^R %	6.8	2013	22.6	10.4	2013	●
AV4	Dietary energy supply - %	131	2017	117	128	2017	●
AV5	Wheat Import dependency ^R %	65.0	2012	83.5	100.0	2012	●
AV6	Agriculture water ^R %	n.a.		n.a.	n.a.		
ACCESS INDICATORS							
AC1	Poverty ^R %	16.6	mult.	n.a.	n.a.		
AC2	Food consumption ^R %	n.a.		14.5	13.7	2018	●
AC3	Unemployment ^R %	10.4	mult.	2.7	2.6	2018	●
AC4	Logistics - index	2.7	2016	3.6	4.0	2018	●
AC5	Inflation ^R %	12.8	mult.	0.9	3.1	2018	●
UTILIZATION INDICATORS							
UT1	Drinking water access - %	86.9	2015	95.8	98.1	2017	●
UT2	Sanitation access - %	80.8	2015	98.6	98.6	2017	●
UT3	Child stunting ^R %	22.9	mult.	n.a.	n.a.		
UT4	Child wasting ^R %	8.7	mult.	n.a.	n.a.		
UT5	Women anaemia ^R %	35.5	2016	25.6	27.8	2016	●
STABILITY INDICATORS							
ST1	Climate change ^R - index	0.1	2019	n.a.	0.04	2019	
ST2	Price Anomalies ^R - index	n.a.		n.a.	n.a.		
ST3	Political stability - ranking	14	2017	74	71	2018	●
ST4	Production variability ^R - \$1,000/capita	10.1	2016	11.0	26.9	2016	●
ST5	Supply variability ^R - kcal/cap/day	29.8	2013	17.0	61.0	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 in the table are from international sources.





Food security snapshot

A. Drivers and determinants

The framework shows that the food security situation of the United Arab Emirates shows good results for undernourishment (CO1), middle of the way on food insecurity experience (CO2) and concerning for obesity (CO3) levels.

Hotspot areas include the following:

- **Availability:** agriculture orientation (AV2) and import dependency (AV5);
- **Utilization:** anaemia among women (UT5).

In spite of data gaps, the emerging picture is that of an affluent nation that relies heavily

on imports to meet its food requirements. Undernourishment (CO1) and severe food insecurity (CO2) are practically non-existent while obesity (CO3) is a major issue. The creation of a food trading hub is a major step in the direction of dampening the effects of shocks. Out of the three outcomes of food security, obesity is the major issue. It needs to be addressed by promoting healthy eating habits and adequate nutritional guidelines. Women's nutritional and health status is of particular concern, especially anaemia. The issue of food waste is also flagged as it will contribute to reducing quantities imported.

B. Action areas

As long as incomes are commensurate with food prices, the food security situation appears to be stable. The road map of the Ministry of Food Security is certainly a step in the right direction, and its policies are clearly set and supported by the findings of the monitoring framework. It is built around five pillars that address the challenge areas of the framework, which are the following:

1. Building a food data strategy;
2. Developing an innovation research and development strategy;

3. Establishing a national food waste programme;
4. Expanding nutritional guidelines;
5. Enhancing the regional trading environment.

It would be interesting to segregate the food security data of the United Arab Emirates by taking migrant labourer workers into account.



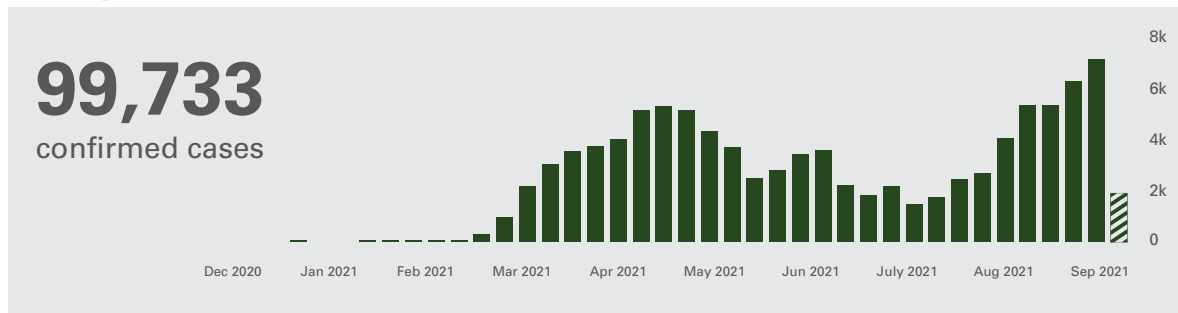


Impact of COVID-19

The COVID-19 pandemic reached the United Arab Emirates towards the end of January 2020 and, by October, had affected close to 100,000 people and 429 deaths had been recorded. The peak of reported cases was

reached in May 2020 with daily infection rates exceeding 750 people. They have since declined to about 400 daily cases, however, with occasional smaller peaks.

Weekly cases



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

Lockdown measures led to trade and supply chain disruptions,¹¹ which disrupted the availability of some essential products. For example, imported vegetables from India faced delays due to restrictive transportation measures to combat the spread of the disease.¹² Such measures, together with the increase in original purchase cost from the source country, led to an increase in prices of food, especially imported fresh fruits and vegetables.¹³ Other examples

include the prices of onions from India, bananas from the Philippines and potatoes from Egypt that increased by 30, 40 and 21 cents, respectively. The prices of other staple fruits and vegetables, especially those rich in vitamin C, increased between 27 to 57 cents.¹⁴ Consumers started to better plan their purchases leading to a decrease in food waste as people became more selective on what they would spend their money on.¹⁵

¹¹ Curfew from 22:00 p.m. to 06:00 a.m. with 24 hours curfew in Dubai; closure of schools, malls, fish, meat and vegetable markets, and religious sites; and suspension of international flights, except cargo.

¹² Gulf News, 2020a.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Food Navigator, 2020.

Box 2. Examples of initiatives

Assisting vulnerable people:

- In Abu Dhabi, a project was launched to distribute 100,000 food baskets comprising rice, pasta, dates, beans, tea, jam and noodles to those whose salary have been affected by the pandemic and do not benefit from other humanitarian projects. The project was launched on April 19, 2020 and covered a period of three months as of May 2020;^a
- The “Ten Million Meals” project was initiated, which worked in collaboration with the “World’s Tallest Donation Box” to distribute food boxes and financial aid with food parcels;^b
- A volunteer group helped foreign workers and more than 100 children in Dubai, Sharjah, Ajman, Abu Dhabi and Al Ain by providing them with food aid. Food baskets included noodles, cooking oil, baby food, rice, sugar and canned goods.^c

Assisting the private sector and businesses:

- In July, 4,500 dairy cows were imported from Uruguay in a bid to produce more milk locally;^d
- To support the agricultural industry, the Agriculture and Food Safety Authority in Abu Dhabi, in June, granted \$174 million to 30,632 farmers and breeders, 138,000 families and 259 small-scale producers.^e

Assisting consumers:

- Union Coop aimed at cutting the prices of 25,000 food products by allotting slightly less than \$41 million to this purpose and distributing food products to competitive suppliers during food shortages. It also facilitated online grocery shopping, which reached 32,000 food and non-food items which were home-delivered; 500 people were employed in this online service;^f
- Dubai Economy initiated a price monitor so that consumers can track prices of 41 basic commodities on a daily basis.^g

a Arabian Business, 2020.

b Euronews, 2020.

c The National, 2020.

d Bloomberg, 2020.

e Arab News, 2020.

f Khaleej Times, 2020.

g Gulf News, 2020b.





References

- Al Mheiri, M. (2019). Technology will make the UAE one of the world's most food-secure countries by 2021. Available at <https://www.thenational.ae/opinion/comment/technology-will-make-the-uae-one-of-the-world-s-most-food-secure-countries-by-2021-1.814174>.
- Arab News (2020). UAE agricultural firm uses technology to help with food security. Available at <https://arab.news/n4wag> (accessed September 7, 2020).
- Arabian Business (2020). Covid-19: new food support scheme launched in Abu Dhabi. Available at <https://www.arabianbusiness.com/culture-society/445197-covid-19-new-food-support-scheme-launched-in-abu-dhabi> (accessed September 7, 2020).
- Bailey, R. (2013). Edible oil: Food security in the Gulf. Briefing Paper EER BP 2013/03, Chatham House, London. Available at <https://www.chathamhouse.org/sites/default/files/public/Research/Energy%2C%20Environment%20and%20Development/bp1113edibleoil.pdf>.
- Bloomberg (2020). UAE Buys Thousands of Uruguay Dairy Cows to Boost Food Security. Available at <https://www.bloomberg.com/news/articles/2020-07-05/uae-buys-thousands-of-uruguay-dairy-cows-to-boost-food-security> (accessed September 7, 2020).
- Bridges, S. (2019). UAE minister launches roadmap to improve food security. Available at <https://www.arabianbusiness.com/politics-economics/415667-uae-minister-launches-roadmap-to-improve-food-security>.
- Crystal, J.A., S.G. Miller and J.E. Peterson (2020). United Arab Emirates. Encyclopedia Britannica. Available at <https://www.britannica.com/place/United-Arab-Emirates> (accessed April 2020).
- Euronews (2020). How are UAE initiatives helping low-income families amidst pandemic? Available at <https://www.euronews.com/2020/05/22/how-are-uae-initiatives-helping-low-income-families-admits-pandemic> (accessed September 7, 2020).
- Food and Agriculture Organization (FAO) (n. d.a). FAOSTAT. Available at <http://www.fao.org/faostat/en/#data/RF> (accessed April 2020).
- _____ (n. d.b). AQUASTAT. Available at <http://www.fao.org/nr/water/aquastat/data/query/index.html?lang=en> (accessed April 2020).
- _____ (2019). Near East and North Africa Regional Overview of Food Security and Nutrition 2018: Rural Transformation - Key for Sustainable Development in the Near East and North Africa. Cairo.
- Fischbach, T. (2018). Advancing food security in the UAE. Policy brief, Mohammed bin Rashid School of Government, Dubai. Available at <https://www.mbrsg.ae/getattachment/859ddec7-f5ed-48dd-99dd-4e1b8f326112/Advancing-food-security-in-the-UAE>.
- Food Navigator (2020). UAE's COVID-19 food trends: Less waste, more self-sufficiency and an orange sales boom. Available at <https://www.foodnavigator-asia.com/Article/2020/07/01/UAE-s-COVID-19-food-trends-Less-waste-more-self-sufficiency-and-an-orange-sales-boom> (accessed September 7, 2020).
- Gulf News (2020a). Coronavirus: UAE shoppers notice hike in fruit and veg prices. Available at <https://gulfnews.com/uae/coronavirus-uae-shoppers-notice-hike-in-fruit-and-veg-prices-1.70597034> (accessed September 7, 2020).
- _____ (2020b). How many kilos of food do UAE residents eat in a year? Available at <https://gulfnews.com/uae/how-many-kilos-of-food-do-uae-residents-eat-in-a-year-1.1587631720057> (accessed September 7, 2020).
- Khaleej Times (2020). Ramadan in UAE: Union Coop reduces prices of over 25,000 products. Available at <https://www.khaleejtimes.com/ramadan-2020/ramadan-in-uae-union-coop-reduces-prices-of-over-25000-products-> (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>.



Swan, M. (2017). Education minister targets skills gap. The National, March 13. Available at <http://www.thenational.ae/uae/uae-minister-of-higher-education-targets-skills-gap>.

The National (2020). Coronavirus: Dubai badminton groups help deliver food to families affected by virus. Available at <https://www.thenational.ae/uae/health/coronavirus-dubai-badminton-groups-help-deliver-food-to-families-affected-by-virus-1.1029557> (accessed September 7, 2020).

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

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





