

BRIEFING PAPER

SECURING SUPPLY

Food security strategies in the GCC and Egypt

MARCH 2021



STRATEGIES FOR SUSTAINABILITY

Access to nutritionally adequate food is defined by the United Nations (UN) as a fundamental human right. But securing this right is a growing challenge for governments around the world. Faced with the dual challenges of rapid population expansion and the impact of climate change, the world's natural resources are coming under increasing strain.

The issue is compounded by the vast quantities of food that is lost through inefficiencies in the world's food supply systems. According to a 2019 report by the Food and Agriculture Organisation (FAO) of the UN, an estimated 2 billion people in the world are experiencing some type of food insecurity.

Despite being classified as 'food secure', the GCC is not spared from those challenges. The issue of food security is compounded in the region by natural arid conditions, while geopolitical instability in the wider Middle East and North Africa region presents significant risks to import pricing and routes. New technology and innovation is critical to resolving many of the pressing challenges facing the GCC's food ecosystem. There is also a need for greater engagement between government entities, private sector firms and academia, to jointly find long-term solutions that benefit the industry.

STATE OF THE MARKET

The Gulf region is heavily dependent on food imports to meet local demand. In the UAE for instance, nearly 90 per cent of demand is met through imports. But this dependence on imports is a significant food security risk to the region.

The Covid-19 pandemic has exposed the vulnerabilities of global food supply chain, making it clear that any long-term

disruptions to global food networks could have catastrophic consequences in maintaining optimum supply in the face of growing demand. FAO reports that global food prices have reached their highest levels since 2014 as a result of the pandemic.

Countries that have steadily worked towards strengthening their in-house production capabilities and logistics networks find themselves much better

placed to ride out the crisis.

Recent years have seen GCC governments take strategic steps to boost their local food production, processing, packaging and storage capabilities.

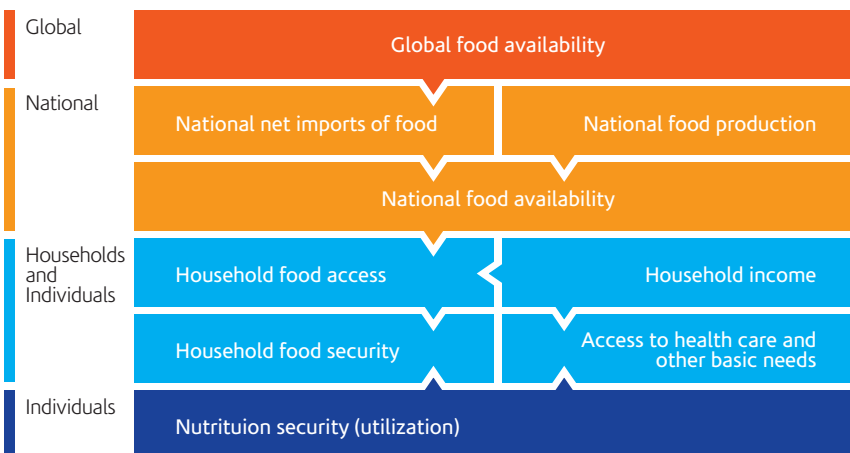
These efforts took on a greater meaning amid the pandemic. In April 2020, the GCC created a temporary food-supply network to facilitate cross-border movement of basic food and medical supplies. A long-term version of this network could be the united-front necessary to strengthen local food resilience.

For these efforts to truly bear fruit, there is a need for greater private sector involvement and a strong foundation of research and development, and honing of local skills.

Nations also need to diversify trade partners, strengthen strategic reserves and improve logistical capabilities to reduce exposure to external factors.

Agricultural technology (agritech), which uses tools such as artificial intelligence (AI), drones and data analytics to boost quality and quantity of yields, has generated significant interest in the GCC. However, unclear regulations, prices and hesitancy surrounding investments mire large-scale success in the agritech space.

Dimensions of food security



Source: Arab Horizon 2030: Prospects for Enhancing Food Security in the Arab Region; FAO

Global Food Security Index 2020 rankings

	Global rank 2020*	Global rank 2019	Overall score /100	Affordability /100	Availability /100	Quality & safety /100	Natural resources & resilience /100
AVERAGE GLOBAL SCORE			60.4	65.9	57.3	67.6	49.1
TOP SCORE			85.3 (Finland)	92.2 (Ireland)	82 (Finland)	94.5 (Canada)	73.5 (Norway)
Bahrain	49	50	64.6	82.6	56.8	76.7	33.7
Egypt	60	55	61.1	51.8	75.2	64.3	49.4
Kuwait	33	27	70.7	82.7	68.3	86.4	37.2
Oman	34	46	70.2	88.5	59.1	83.7	43.8
Qatar	37	13	69.6	80.3	70.7	84.3	33.6
Saudi Arabia	38	30	69.5	79.6	73	79.8	34.1
UAE	42	21	68.3	73	66.5	88.8	42.4
LOWEST SCORE			35.7 (Yemen)	18.3 (Malawi)	27.5 (Yemen)	33.1 (Sierra Leone)	32.2 (Benin)

Index based on 34 unique indicators across 113 countries (100= most secure)


*The 2020 index includes "Natural Resources and Resilience" as a fourth main category, highlighting food systems' resiliency against climate change. The sub-indicators under this category include food import dependency, disaster risk management and projected population growth, resulting in a significant drop in overall scores for many Gulf nations.

Source: Global Food Security Index, The Economist Intelligence Unit

COUNTRY OUTLOOK

Regional efforts to achieve food security involve a blend of innovation, international investments and building local reserves

BAHRAIN

 The kingdom's strategy to strengthening food security involves achieving self-sufficiency in fisheries, egg production and livestock, by engaging the private sector and foreign investments.

The Bahrain Ministry of Works, Municipalities Affairs and Urban Planning has identified a number of project sites to initiate the food security projects. Minister Essam bin Abdulla Khalifa had previously stressed that partnership with the private sector "is essential for enhancing food security in the kingdom".

The Agriculture and Marine Resources department is undertaking the upgrade of the Ras Hayyan fishing port, to encourage greater private sector involvement. Work is also underway on a BHD3m (\$8m) pulses processing factory located in Hidd, undertaken by the Bahrain Agricultural Foods Storage and Security.

Bahrain-based entities are also investing in food startups. In February 2021, FA Holding invested \$200,000 in a plant-based food startup Sprout in the UAE.

EGYPT

 Agriculture has been an essential part of Egypt's history, buoyed by the rich conditions of the Nile. Egypt continues to produce a number of food varieties, cotton, and livestock, both for domestic consumption and exports.

Egypt is the world's largest wheat buyer, consuming around 20 million tonnes (MT) of wheat annually and

importing nearly 60 per cent of it. During the coronavirus pandemic, the government focus shifted on boosting strategic reserves of wheat, supported by the General Authority for Supply Commodities.

In April 2020, the Ministry of Supply announced that Egypt will build giant stores for basic commodities across the country to achieve self-sufficiency for 8-9 months instead of 6 months.

Furthermore, Cairo boosted investments in the agriculture and irrigation sector in its 2020-2021 budget, with an increase of 2 percent, to enhance the state's food security and rationalise the food imports during the pandemic.

In February 2021, the Egypt division of the UAE's Jenaan Pipes & Irrigation Systems signed a AED22m (\$6m) loan agreement with Abu Dhabi Exports office. The deal will allow the former to import raw materials from Borouge to produce irrigation systems that will contribute to building the world's biggest sugar refinery in Egypt. The

projects will not just lead to growth and expansion of both entities, but they will also boost Egypt's food security. The refinery will produce 900,000 tonnes of sugar annually, reducing Egypt's reliance on sugar imports by 80 per cent. The irrigation systems will also be used to draw water from wells drilled into the Nubian Sandstone Aquifer System to irrigate land to produce 2.5MT of sugar beet annually.

KUWAIT



Kuwait's food security investment strategies include a focus on investing in scalable agritech firms, as was demonstrated by one high-profile fund injection in early 2020. Kuwait's Wafra International Investment Company announced in April 2020 that it will invest up to \$100m in the UAE-based startup Pure Harvest, the largest-ever commitment to an agritech firm in the Middle East.

Currently, Wafra is investing \$10m in Pure Harvest; the rest will be used to finance facilities. Pure Harvest plans to construct high-tech, climate-controlled greenhouses that use sunlight to produce pesticide-free fruit and vegetables across Middle East markets, an approach suited to high-sunlight, low-rainfall states.

A joint venture (JV) was launched between Kuwait's Nox Management and Germany's &ever, alongwith German engineering companies SAP and Viessmann. The JV opened its first commercial indoor vertical farm spread across 3,000sqm, in August 2020, growing up to 550kg of greens and herbs per day using dryponics technology. Dryponics involves keeping the roots of the plants dry, eliminating algae growth and possible contamination.

OMAN



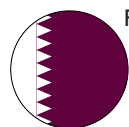
The sultanate's vision for food security stresses fisheries as a key industry, and as one of the top five industries expected to drive Oman's

diversification programme.

Oman is targeting an aquaculture output of 200,000 tonnes per year by 2040, both to meet domestic demand and to become a key exporter in the Gulf, Asia and Europe.

Oman Food Investment Holding Company (OFIC), the government's food sector development arm, was established in 2012 to promote food security through partnerships with government agencies, investors and private operators. As of November 2020, it had a portfolio of 23 companies and investments totalling around \$1.5bn, in firms such as Mazoon Dairy Company, Al Murooj Dairy and Oman Dates Production. OFIC was absorbed into sovereign wealth fund Oman Investment Authority (OIA) in 2020.

QATAR



Food security is a core objective in the Qatar National Vision (QNV) 2030, with a policy mix of investing abroad to secure domestic supply and improving the use of local resources. The Qatar National Food Security Programme (QNFSPP) was launched in 2008, in line with the principles of the QNV 2030.

Hassad Food was established in 2008, as a wholly owned subsidiary of Qatar Investment Authority, to spearhead investments in agribusinesses across the world, including Australia, Turkey, Ukraine and Brazil.

The three-and-a-half-year dispute between Qatar and some of its neighbouring states saw Doha reconsider its reliance on imported food, much of which was transported through Saudi Arabia and the UAE.

One result is that Qatar has become self-sufficient in terms of milk and fresh poultry production.

The government has introduced initiatives to support local food production, including low-interest loans for farmers, support and guidance for improved farming techniques. However, conventional farming remains constrained.

The Qatar National Food Security Strategy 2018–2023 was launched with a focus in four key areas: increasing local production for products such as milk, poultry and fish; creating strategic reserves of non-local foods such as grains; diversifying sources of import; and improving the local supply chain.

Mostly recently, in January 2021, the Qatar Ministry of Municipality and Environment (MME) announced plans to establish plant factories to ensure production of leafy vegetables round the year under controlled conditions.

SAUDI ARABIA



Despite previously being a wheat exporting nation, Saudi Arabia introduced a ban on production in 2015–2016 as a result of the depleting levels of the country's groundwater. In November 2018, the ban was partially rescinded to provide smaller sized producers with alternative field crop and the produce is purchased by the Saudi Grains Organisation (Sago).

Recognising strong domestic demand for food and feed, the Saudi government is encouraging agricultural investments abroad to produce commodities which can then be imported, including wheat, rice and green forage.

The Saudi Agricultural and Livestock Investment Company (Salic) was formed in 2011 to ensure long-term food security through mass production and investments. An arm of the Public Investment Fund, Salic has since invested in several countries including Canada, Australia, Brazil and Ukraine, as well as in key companies.

British agritech firm Hummingbird Technologies received a £7m fund injection from Salic in 2019. The firm uses drones, AI and satellite imagery to produce high-resolution maps that can help farmers forecast crop stress, spot disease and weeds, and predict yields.

In May 2020, Salic acquired a 30 per cent stake in Indian group Daawat Foods, as part of its strategy to secure rice supplies. And most recently, in Feb-

ruary 2021, Salic signed an agreement with Brazil's Minerva Foods to establish a joint venture in Australia for the processing and export of red meat.

Salic has also been securing the kingdom's food storage capacities.

In August 2020, Salic and Saudi Arabia's National Shipping Company jointly established the National Grain Company, which includes a grain-handling terminal at Yanbu Commercial Port. The terminal will start with a capacity of about 3MT per year by 2022, to gradually increase to 5MT per year.

UAE



The UAE's appetite for innovation-led growth has enabled a steady improvement in local agricultural practices of certain foodgroups. Moreover, significant investments in logistics infrastructure have made the UAE a leading player in global trade.

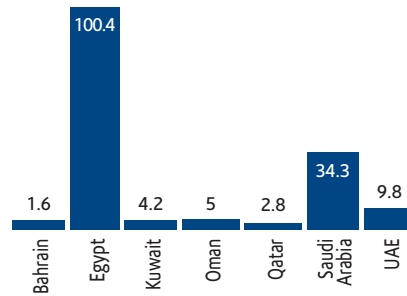
The UAE imports almost all of its wheat, corn, rice and barley, and the establishment of grain siloes was seen crucial to reducing risks associated with global shortages and price surges. In 2016, the UAE's Al Dhafra Holding company launched 20 grain siloes alongside the port of Fujairah, with a capacity of 300,000 tonnes.

Al Dhafra also launched a 10ha rice factory in December 2016 at Khalifa Industrial Zone in Abu Dhabi. Owned by Al Dahra Kohinoor, the AED140m (\$38.1m) factory produces up to 120,000 tonnes of rice per annum, with 40 siloes each boasting a 750-tonne capacity.

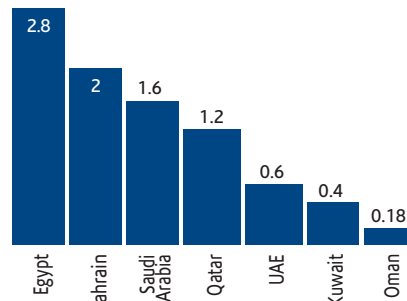
The UAE launched its National Food Security Strategy 2051 in November 2018, and in June 2020, the cabinet instated a national system for sustainable agriculture, striving to improve self-sufficiency from targeted agricultural crops to 5 per cent annually; increase average farm income to 10 per cent annually; raise agriculture workforce by 5 per cent annually; and achieve a 15 per cent annual reduction in water used for irrigation of a

KEY INDICATORS (GCC & EGYPT)

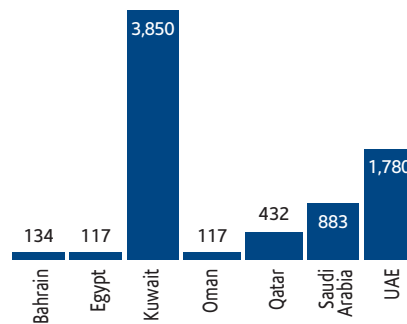
Population in millions (2019)



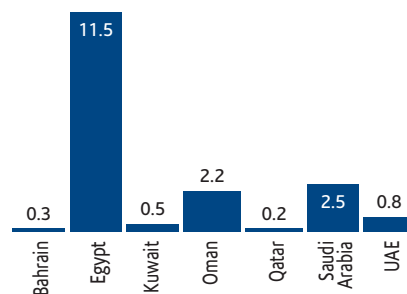
Arable land as % of total land area (2016)



Water stress % (2017)



Agricultural value added as % of GDP (2017)



Source: World Bank, Aquastat (FAO)

production unit.

In Abu Dhabi, the Agriculture and Food Safety Authority (Adafsa) and Abu Dhabi Investment Office (ADIO) have been working together to spur investment in the local ecosystem.

In June 2020, Adafsa and ADIO announced a AED1bn pipeline of investment opportunities and awarded five investment projects worth AED75m (\$20.4m) to four local companies.

Additionally, in December 2020, Adafsa approved five investment projects worth AED524m (\$1433m) to establish fish, vegetable, fruit, cattle and poultry farms on a combined land and sea area of approximately four million sqm.

In February 2021, collaborative agreements were signed between the Adafsa and the FAO Representation in the UAE and Subregional Office for GCC and Yemen, to develop a master plan for sustainable agriculture and design assessment tools to monitor biosecurity in Abu Dhabi.

ADIO has also invested \$100m across four agritech companies, including Madar Farms, AeroFarms, RNZ and RDI, partnering with them to build local agritech R&D facilities and production centres.

The UAE is also continuing to expand its storage and processing capabilities. Most recently, Abu Dhabi Ports signed a 50-year land lease agreement with Australia's Anchorage Investment, to develop grain storage and processing plants with an initial design capacity of 300,000 tonnes at Khalifa Port. The complex will be managed by National Feed, an Abu Dhabi-based agro-commodity processor.

In a bid to improve nutritional awareness among consumers, the UAE cabinet launched a Nutrition Labelling Policy in September 2019.

Beginning January 2022, the rule requires pre-packaged food to indicate the contents of fat, saturated fats, sugars and salts by using traffic light signals for high (red), medium (amber) and low (green) percentages.

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Today, Mashreq has a significant presence in 11 countries outside the UAE, with 21 overseas branches and offices across Europe, the US, Asia and Africa.

Mashreq launched its new Vision and Mission recently, outlining its commitment towards its clients, colleagues and

the community. In line with its vision to be the region's most progressive bank, Mashreq leverages its leadership position in the banking industry to enable innovative possibilities and solutions for its customers across corporate, retail, international, treasury and Islamic banking.

Mashreq is proud to be the first financial institution in the UAE to be awarded the Gallup Great Workplace Award for four consecutive years from 2014-17.

Mashreq also continues to invest in recruiting, training and developing future generations of UAE national bankers.

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