



POLICY REPORTS

The U.A.E.'s Food Security Vision: Innovation, Investment, and Partnerships

Nov 2024



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The U.A.E. is inherently susceptible to food insecurity given its harsh, desert environment, low water table, and the adverse effects of climate change. Primarily due to its desert landscape, the U.A.E. imports more than 90% of its food, making the country reliant on global supply chains. Global and regional crises such as the COVID-19 pandemic therefore affected the U.A.E. food system more acutely, necessitating quick and effective mitigation strategies by the U.A.E. government. After the COVID-19 pandemic, the U.A.E. re-doubled efforts to mitigate the risks associated with supply chain disruptions. The U.A.E. developed the **National Food Security Strategy 2051** to top the Global Food Security Index by 2051. The key pillars of this strategy are boosting domestic food production, bolstering local manufacturing, driving innovation and private capital into its agricultural technology sector, and securing international acquisitions and partnerships.

Food Security in-Focus

The desert and arid climate of the U.A.E. makes it difficult for vegetation and plants to thrive. The U.A.E. is also vulnerable to the effects of climate change such as extreme heat, storm surges, sea level rise, water stress, dust, and sandstorms. The U.A.E. is also one of the most water-scarce countries in the world and relies on desalination to make water potable. High water consumption, increased economic development, and limited water resources impact food security levels in the U.A.E. According to the World Bank, the water table in the U.A.E. drops about one meter per year. Some projections estimate that the U.A.E. will deplete its natural freshwater resources in about 50 years.

According to the World Health Organization (WHO), the U.A.E. is projected to register a population increase of 44% to over 15 million by 2050. The U.A.E.'s rapid population growth will, as expected, lead to a proportionate increase in food demand. Along with population growth and high net migration rates, the U.A.E. is experiencing high levels of urbanization. Both population growth and urbanization contribute to the U.A.E.'s lack of food self-sufficiency. The U.A.E. currently has about 38,000 farms, but their overall contribution to the U.A.E.'s food supply is negligible, requiring almost complete reliance on food imports.

Without adequate local food production capability or its own direct import sources, the U.A.E. remains vulnerable to global supply chain shocks such as the COVID-19 pandemic, Russia's invasion of Ukraine in 2022, and the Israel – Gaza conflict. These events continue to impact supply chain resilience in the Middle East, including in the U.A.E., exposing the vulnerability of the region to external shocks. **Specifically, during the COVID-19 pandemic, the U.A.E. experienced major disruptions in the supply chain because the country relies on foreign suppliers that were only mitigated through quick and effective action.** The pandemic underscored the urgency of the U.A.E.'s efforts to prioritize supply chain resilience and enhance strategic food stockpiles.

The U.A.E.'s National Food Security Strategy

In order to mitigate both the natural environmental changes and man-made crises affecting U.A.E.'s food security, the U.A.E. government has adopted the National Food Security Strategy 2051. This national action plan is the U.A.E.'s overarching policy to improve food security outcomes domestically and position the U.A.E. as a global leader in this sector.

The National Food Security Strategy includes the following high-level outcomes:

- Position itself as the top country in the Global Food Security Index by 2051
- Develop a comprehensive national system based on enabling sustainable food production through modern technologies
- Enhance local production
- Develop international partnerships to diversify food sources
- Activate legislation and policies that contribute to improving nutrition
- Activate legislation and policies to reduce waste

NATIONAL FOOD SECURITY STRATEGY



UAE's population having access to sufficient, safe and nutritious food for an active and healthy life at affordable prices at all times

2051 VISION
World leading hub in innovation-driven food security

2021 MISSION
To champion agribusiness trade facilitation through a whole-of-nation apparatus and to ensure food security under all circumstances through enabling technology-based production and supply of food, promoting international trade partnerships, and enforcing policies and regulations to enhance nutritional intake and reduce food loss and waste.

Main Food Items

Consumption Production Nutrition

18 main food items

Plant products

Fruits	Vegetables	Grains & Pulses	Other
Apples, Bananas, Dates	Leafy Greens, Tomatoes, Potato, Cucumber	Pulses, Rice, Wheat, Sugar	Oils

Livestock products

Cattle meat, Goat meat, Poultry meat, Milk, Eggs

Fisheries

Fish

UAE's Target on the Global Food Security Index

Current: 31	2021: 9	2051: 1
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Domestic Production Impact

+100,000 TONS
Domestic production increase of strategic food items

Water - Food Nexus UAE Water Security Strategy 2036

2016: 8.2 MN	2036: 7.1 MN
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Water supply for agriculture m³/day

Economic Impact 2021

Employment Impact: ~16,000 jobs
Monetary Impact: 22 BILLION

Enablers

- Build an effective food security governance model
- Establish and implement a national R&D Food Security agenda
- Develop the National Food Security Database
- Build human capacity for food security functions
- Engage the community to shift food security notions and behaviors

5 Strategic Objectives:

- Facilitate global agri-business trade and diversify international food sources**
 ↑24% Contribution of strategic investments from overall imports
 ↑67% Secured target alternative international sources
- Enhance sustainable technology-enabled domestic food supply across the value chain**
 ↑30% Yield improvement from new technology-enabled production
 ↑15% Increase in production of select strategic food items
- Reduce food loss and waste**
 ↓15% Reduction of food loss and waste
- Sustain food safety and improve nutritional intake**
 ↓35% Reduction in food safety incidences
 ↓15% Reduction in consumption of unhealthy food elements
- Enhance capacity to respond to food security risks and crises**
 ↑100% Successful completion of emergency drills
 ↑100% Achievement of reserve targets for 6 priority food items

Source: u.ae

In order to achieve the above goals, the U.A.E. is pursuing the following elements:

- 1. Boosting local production:** The National Food Security Strategy aims to increase domestic food production to 50% by 2051. The U.A.E. is enhancing its food supply through building new farms and promoting national action programs such as **Plant the Emirates**. This initiative aims to increase the number of productive farms, expand organic farming, and reduce agricultural waste. The U.A.E. government is becoming a direct investor in farming projects such as the Sharjah Wheat Farm. The U.A.E. government actively supports local agricultural development by providing financial incentives for farmers willing to adopt modern farming technologies and start new projects.
- 2. Technological Innovation and Research and Development (R&D):** The U.A.E. seeks to develop and implement new methods of farming in its harsh, arid climate. This includes pioneering vertical farming, organic farming, and hydroponics. Complementing these new farms and projects, the U.A.E. seeks to incorporate agtech such as analytics, sensors, genetic research, and smart technology systems that yield more efficient and productive crops, and increase efficiencies in farming techniques. **Bustanica**, a food-tech investment of Emirates Airline, is the world's largest indoor hydroponic farm and an example of a key project under this strategy pillar. The U.A.E. government is also seeking to develop a R&D ecosystem that supports the testing and formulation of new agtech ventures and platforms through a robust plan aiming to incentivize innovation and invest in new technologies. Federal and Emirate-level research and innovation centers such as the Advanced Technologies Research Council (ATRC), Hub71, and Dubai Future Foundation are further propelling the development of this R&D ecosystem by nurturing emerging technologies and incubating innovative start-ups.

- 3. Foreign Acquisitions and Investments:** Internationally, the U.A.E. is embarking on an ambitious investment strategy in the sector that includes commercial partnerships, farmland acquisitions, and securing new supply chains – all aimed at securing a steady supply of food imports not interrupted by local, regional, or international crises. Due to its current reliance on food imports, the U.A.E. government, investment funds, and its key entities such as **ADQ, Abu Dhabi Ports, and DP World**, seek to secure their own supply chains and strengthen logistics. **The U.A.E. is signing land agreements and buying farmland abroad, particularly in Africa, Asia, and Latin America.** Since the



Abu Dhabi Port

- COVID-19 pandemic and Russia's invasion of Ukraine, key supply chain disrupters, the U.A.E. government and its private sector partners have amassed some 960,000 hectares of farms overseas. The U.A.E.'s goal is to cut out middlemen, ensure secure and efficient logistics networks, protect its food supply, and reduce the cost of food imports. U.A.E. government officials estimate that they can save up to 25% on import spending by having direct access to food crops.
- 4. Bolster Local Manufacturing Capability:** The U.A.E.'s goal under this pillar is to strengthen local manufacturing capability and facilitate the warehousing and storage of raw materials. The U.A.E. government is importing raw materials and food imports in unrefined states for reprocessing, re-packaging, and developing by-products within the country. In addition, the government is also facilitating and incentivizing manufacturing of food products through the development of new processes and technologies. **Make it in the Emirates**, led by the U.A.E. Ministry of Industry and Advanced Technology (MoIAT), is the key government manufacturing initiative that aims to drive industrial growth in the U.A.E. by boosting its GDP contribution from \$36 billion to \$82 billion by 2031. MoIAT also established a framework of standards to increase trust in locally manufactured food and beverage products and implemented sustainable industrial policies to reduce resource consumption.

In order to grow the food security sector, **the U.A.E. is offering a variety of incentives including financing and loan schemes to support the strategy.** The purpose of this financing is to drive private capital into the sector and also promote start-ups and entrepreneurs. In 2023, the Emirates Development Bank's (EDB) AgTech loans scheme allocated \$27 million towards financing initiatives in the food security sector. Other key incentives include the government supporting designated hubs and clusters that enable access to funding and investments, such as Abu Dhabi's AgriFood Growth & Water Abundance (AGWA) Cluster. MoIAT also offers a package of competitive incentives to support investments in industrial and technology companies that are working

in strategic sectors such as food security. In partnership with the EDB, those incentives offer competitive financing facilities for priority industries and advanced technology sectors, competitive tariffs for energy sectors, customs exemptions on investments, and production inputs for the industrial sector, such as machinery and raw materials.

U.A.E. Government Players



Emirates Food Security Council - WAM

In order to meet the benchmarks of the U.A.E. National Food Strategy, the U.A.E. is bolstering state institutions and programs designed to meet the food security challenge. The U.A.E. government first seeks to ensure food and water security for residents and create a strong enabling environment where both private and public institutions innovate in the area of food security.

The key U.A.E. government institutions and programs on food security are:

- **U.A.E. Ministry of Climate Change and Environment:** The governmental body responsible for ensuring food security in the U.A.E. In positioning food security in the climate change ministry, the U.A.E. recognizes the linkages between climate change and food insecurity. The Ministry of Climate Change supports the National Food Strategy by developing agricultural business and responsible investment in sustainable food systems. The Ministry promotes research and development programs, and supports the adoption of advanced technology to enhance food, water, and environmental security. Recently, the Ministry announced the establishment of the inaugural Regional Centre of Excellence for Transforming Food Systems in collaboration with the U.N. Food and Agriculture Office (FAO). This new center is designed to foster innovation and strategic reform in food systems throughout the region.
- **Emirates Food Security Council:** A federal entity with the mandate to strengthen the efforts of government authorities working on food security issues and to achieve the objectives of the National Food Security Strategy 2051. The Emirates Food Security Council supports the research and development pillar of the strategy through building databases related to food security and conducting research on food security risks.
- **Abu Dhabi Agriculture and Food Safety Authority (ADAFSA):** The Abu Dhabi governmental authority that oversees food security. ADAFSA is a recognized leader in promoting sustainable agriculture and fostering private sector partnerships in food security. ADAFSA has an Innovation and Development section that conducts food security research and the development of agricultural technologies. ADAFSA is also responsible for event programming such as Abu Dhabi Agriculture and Global Food Week (ADAFSW) and the inaugural Global Food Security Summit taking place this November.
- **ADIO:** U.S.-U.A.E. Business Council member Abu Dhabi Investment Office (ADIO), the entity charged with attracting FDI and new businesses to Abu Dhabi, has been active in the food security sector. ADIO is a major player in food security investments in the U.A.E. through the Ghadan 21 accelerator program. AGWA represents the next phase of Abu Dhabi's strategy to address global food and water insecurity by channeling investment and resources into future-focused economic clusters to address critical global challenges. By 2045, AGWA is expected to contribute \$24.5 billion in incremental GDP to Abu Dhabi's economy and create 62,000 new jobs.

Key U.A.E. Government-led and Government-supported Initiatives



Sharjah Ruler inaugurates wheat farm 1st phase in Mleiha - Source: Sharjah Government Media Bureau

- **Plant the Emirates:** Plant the Emirates is a major government-led initiative launched in October 2024. This new program will support and enhance the National Food Strategy's boosting domestic production and agricultural innovation pillars. As part of Plant the Emirates, the U.A.E. will establish a **national center to promote domestic farming** with the aim of increasing agricultural production by one fifth over the next five years. The National Agriculture Center will also be a testing ground for agtech and drive collaboration between the public and private sectors to foster agricultural research, improve productivity, and bring down costs.
- **Food Tech Valley (Dubai):** Launched in 2021, the Food Tech Valley is a smart food technology center designed to develop vertical farming and other advanced agriculture technologies and bolster U.A.E. food security. During COP28, Food Tech Valley announced an agreement with a consortium to develop a gigafarm capable of recycling more than 50,000 tons of food waste and growing two billion plants each year. The Food Tech Valley is an important testing ground for innovative agriculture solutions and has led to breakthroughs in waste reduction.
- **Abu Dhabi Food Hub:** The Abu Dhabi Food Hub, supported by KEZAD and Abu Dhabi Ports Group, is an integrated ecosystem for the trading of food commodities. This project is set to be the largest food trade zone in the region and leverage e-commerce capabilities. This food hub will support the manufacturing pillar of the strategy.
- **ADIO's AGWA Cluster:** Led by the Abu Dhabi Department of Economic Development (ADDED) and ADIO, the new AGWA cluster is set to become a global hub for commercial opportunities in the food security sector. AGWA will become a central platform for the testing and commercialization of new food technologies in a supportive regulatory environment. A secondary mission of AGWA is to use the new technologies that emerge in the cluster to help alleviate food and water insecurity globally.
- **U.A.E. Agtech Accelerators Program:** In collaboration with the U.A.E. Government Accelerators program, this initiative is designed to make entering into the agriculture sector easier through cost reductions on the U.A.E.'s agricultural license, loan guarantees, and guidance on best agricultural practices.
- **ne'ma – the National Food Loss and Waste Initiative:** An important national action plan that marshals key stakeholders, including the private sector, to address food loss and waste across the whole value chain, from production to consumption. Ne'ma seeks to support the National Food Strategy's mission to bolster local production.



Innovation and R&D Centre - Food Tech Valley (Dubai)



Abu Dhabi Food Hub - Source: Gulf News

- **Sharjah Wheat Farm:** The U.A.E. launched a major wheat farm in Sharjah in 2022 to boost local production and reduce the reliance of the U.A.E. on foreign wheat imports. The project will be completed in three phases: the first phase will be on an area of 400 hectares, the second phase will be on an area of 880 hectares in 2024, and the third phase will reach its completion on an area of 1,400 hectares in 2025.
- **U.A.E. Aquaculture Program:** Aquaculture involves cultivating freshwater and saltwater organisms under controlled conditions. The Sheikh Khalifa Marine Research Center consists of several facilities including an integrated closed hatchery with state-of-the-art technologies used globally with a capacity of 10 million fingerlings of local fish annually. The U.A.E. has formulated an integrated regulatory framework for the aquaculture sector that includes general conditions for aquaculture farms, occupational health and safety requirements in aquaculture farms, and aquaculture products' quality and safety framework. The framework is expected to contribute to achieving the objectives of the sector, and strengthening the aquaculture industry to create new investment opportunities.

Additional U.A.E. -Government-led Technology Initiatives



Mohammed bin Rashid attends the launch of the second edition of the Global FoodTech Challenge - *Source: Dubai Government Media Office*

- **ATRC's agritech venture:** The Advanced Technology Research Council (ATRC) launched a series of research and development (R&D) ventures in July 2024. Among these new ventures, ATRC announced an agritech venture with the purpose of pioneering robotic technologies in the farming and food harvesting process.
- **FoodTech Challenge:** A global competition hosted by the U.A.E. Ministry of Climate Change and Environment and **Tamkeen**, in association with **ASPIRE**, that seeks to find the next wave of technology innovations that are on the cusp of transforming traditional agriculture practices. The FoodTech Challenge is critical to the U.A.E.'s drive to become a global R&D leader in agricultural technology development and incubate start-ups that can help combat food security.
- **Abu Dhabi Agriculture and Food Security Data Platform:** This ADAFSA-supported platform is a strategic tool that supports decision-making on food security and agriculture matters in Abu Dhabi. Co-developed with partners in the private sector, the platform includes indicators and threat monitoring. Investment data and potential investment opportunities are also incorporated into the platform.
- **The Food Security Research Platform:** An online portal that allows specialists to share their latest findings and publications across eight promising research themes. The platform aims to serve the needs of a wide range of stakeholders in terms of data, information, and knowledge on research and development in sustainable food systems across the food value chain.
- **Food Security Dashboard of Dubai:** This Dubai-based platform incorporates AI to analyze food security data and indicators. The Food Security Dashboard specifically monitors stock availability, production, and consumption and is a prime example of the strides the U.A.E. is making in the agtech space.

ADQ: A National Champion

In addition to government institutions, the U.A.E. includes key private sector companies working to meet the goals of the National Food Strategy. This includes U.S.-U.A.E. Business Council members **ADQ, Emirates, and Al Ghurair Group** which are complementing U.A.E. governmental efforts to support the U.A.E. National Food Strategy.



ADQ: ADQ is one of Abu Dhabi 's most prominent and one of the Middle East's largest holding companies. **ADQ is focused on all three elements of the National Food Strategy including boosting local production, pioneering new agtech, and engaging in foreign acquisitions and investments.** As such, ADQ has steadily expanded its food and agriculture business sector portfolio to become an important private sector champion on food security in the U.A.E. Some of ADQ's significant companies, projects, and initiatives in this sector include:



Silal: In 2020, ADQ established Silal, an agri-food company focused on enhancing local food production, providing infrastructure and access to diverse U.A.E.'s food systems, and unlocking the industry potential in the U.A.E. and beyond. Since its inception, Silal has become a leader in the U.A.E.'s agri-food industry by leveraging innovation, advanced technology, and R&D to improve agricultural efficiency. The Innovation Oasis, is Silal's state-of-the-art R&D center in Al Ain, exemplifies this commitment, fostering an ecosystem to transform the sector with cutting-edge solutions.



Al Dahra: Al Dahra is a U.A.E. agribusiness leader that specializes in the cultivation, production, and trading of animal feed and essential human food commodities such as grains, rice, flour, fruits, and vegetables.



Agthia Group: Agthia Group is a major holding company that includes businesses providing food and beverage products, including water (Al Ain, Al Bayan, Alpin Natural Spring Water, Bambini). Agthia Group includes a venture capital fund that is seeking to invest in agtech and promote innovation in the food security sector. Agthia Group is also working to enhance food production in the U.A.E. in support of the National Food Security Strategy.



ADQ's International Ventures: ADQ also fosters international food security partnerships to help support the U.A.E.'s goal of becoming a global leader in this sector. Earlier this year, ADQ signed an investment and finance framework with Kenya that included exploring opportunities in food production. Outside of Africa, ADQ remains a significant investor in food production and owns 45% of the Louis Dreyfus Company, one of the world's top farm commodity traders. ADQ's global footprint in the food and water sector also includes direct ownership of 142,000 hectares of farmland globally.



Lulu Group International, a major U.A.E.-based supermarket chain, has a major international presence. Lulu established a significant sourcing, food processing, and growing export hub in Italy last year. This hub supports their strategy of establishing sourcing and food processing units globally to ensure uninterrupted supplies back to the U.A.E.

Private Sector Companies Focused on Innovation and R&D



Pure Harvest: A sustainability-focused, agriculture company pioneering the use of smart farms and high-tech greenhouses in the U.A.E. Pure Harvest operates **Oasis**, a large climate-controlled greenhouse that uses innovative farming methods to produce crops. Pure Harvest's international ventures includes partnering on **Platform, a cloud-based, AI-enabled analytics platform that helps** farmers optimize the farming process and boost production. Pure Harvest is resident in **ADGM**.



AeroFarms, an American agricultural technology company, was one of the earliest U.S. investors in the U.A.E. agtech space. A pioneer in the field of vertical farming, Aerofarms and **ADIO launched the world's largest R&D indoor vertical farm in the U.A.E. in 2023**. The farm, Aerofarms AgX, works with companies and universities on research projects to bolster food security in desert climates. The Aerofarms AgX farm is a key project in Abu Dhabi's Agtech ecosystem and is part of ADIO's vision to create sustainable investment opportunities in this sector in Abu Dhabi.



2PointZero is a new next-generation holding company that stands at the forefront of pioneering advancements across multiple sectors, from finance, investment banking, and insurance to technology, mining, and resource management, and beyond. One of its key objectives is to empower sustainability by advancing agricultural innovation, improving food distribution, and ensuring equitable access to nutritious food for all communities.

Private Sector Companies Focused on Boosting Production and Overseas Investment



Al Ghurair Group: Al Ghurair Group is a diversified family business group based in Dubai with operations in seven industry sectors, including the food industry. Al Ghurair Foods is boosting the food production capacity of the U.A.E. through a series of major projects. This includes three planned mega food processing projects, including a plant at Abu Dhabi Food Hub. These projects will focus on starch production, flour milling, and poultry farming to boost the U.A.E. food supply chain.



Elite Agro: Elite Agro is an agriculture company focusing on large scale integrated farming operations. The company's overseas farm operations include Serbia, Morocco, Mauritania, Ethiopia, Sierra Leone, Jordan, Saudi Arabia, Malaysia, and Bahrain.



Emirates (Key Project: Bustanica): Formerly called Emirates Crop One, Bustanica is the world's largest vertical farm. This project uses hydroponics technology that does not require soil, sunlight, or pesticides. The three-story, 330,000-square-foot facility is **producing more than 6,500 pounds produce every day** in which a large share will be allocated for the consumer retail market in the Middle East.



DP World (Key Project: Agri Terminals facility): DP World is heavily involved in the logistics aspect of food security and ensuring the U.A.E. has secure overseas supply chains. Earlier this year, DP World broke ground on the Agri Terminals complex. This facility will specialize in storing and processing various agricultural products, including pulses, grains, corn, and soybeans. The Agri Terminals facility will leverage infrastructure such as pneumatic ship unloaders and advanced conveying equipment to bolster the U.A.E.'s food supply chains in line with the National Food Security. Additionally, **JAFZA**, DP World's flagship free zone, plays a pivotal role in food security efforts by securing stable supplies of food and beverages and ensuring supply chain efficiency.

U.A.E. Programming

The U.A.E. is host to many notable conferences every year related to food and agriculture. Two of the most important are Gulfood and the Global Food Security Summit.

The Gulfood logo features the word "Gulfood" in a stylized, elegant serif font. The letter "f" is notably larger and more decorative, extending downwards and to the right.

Gulfood: A world-renowned annual exhibition in Dubai that convenes global stakeholders to discuss developments in the food and beverage (F&B) industry. The inaugural Gulfood Green, an offshoot conference that will focus on driving food sustainability solutions, will take place later this month in Dubai.



Global Food Security Summit: In November 2024, the U.A.E. will host the inaugural World Food Security Summit. This major event will support international efforts to eliminate hunger and enhance the U.A.E.'s position as a platform for managing dialogues, discussions, and initiatives in global food security. Senior government officials, decision-makers, and experts will hold discussions on food security challenges and explore innovative solutions to strengthen the global food security system.

International Cooperation



COP28 U.A.E. - Source: Arabian Business

Beyond ensuring the security of its food supply and logistics chains, the U.A.E. government is increasingly focused on developing a global network and a local technology ecosystem that secures their role as a global leader on food security. The U.A.E., as a diplomatic leader of the Global South, also seeks to drive food and water security in developing countries, particularly in Sub-Saharan Africa. The U.A.E.'s food security ambitions dovetail with the U.A.E.'s broader sustainable development agenda. The U.A.E. is emerging as an important player driving solutions to global food security challenges through international partnerships, including with the United States. These include major international agreements and partnerships forged around COP 28 hosted in Dubai during the U.A.E.'s presidency of COP.

In the run-up to COP 28, the U.A.E. expanded a number of food security initiatives. At COP28 itself, in a conference first, food security was a major plank of programming and policy initiatives. COP28 produced the landmark **U.A.E. Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action**. This declaration committed 159 countries to scale up adaptation and resilience for farmers, fishers, and food producers and to promote food security and nutrition through social protection systems.

Another breakthrough was the inclusion of food in the first-ever Global Stocktake, which signaled that food security is integral to international efforts to combat climate change. The FAO also released a roadmap at COP28 for transforming food systems to limit global temperature rise to 1.5 degrees C.

COP28 also recognized the importance of marshaling non-state actors, including the private sector, to combat food and water insecurity. Over 200 non-state actors committed to act on food systems in a Call to Action facilitated by the UN Climate Change High-Level Champions. Leading companies, including U.S.-U.A.E. Business Council members PepsiCo and Google, committed to collectively scale regenerative agriculture. Additionally, the U.A.E. and the United States launched **AIM for Scale**, a new mechanism to support food system innovations that improve resilience and mitigate emissions, and transition them to scale. Notably, also at COP 28, the Gates Foundation and the U.A.E. made a combined \$200 million investment in agricultural innovation to harness the power of AI and technology in response to immediate and long-term threats facing food systems caused by climate change.

In addition to food security initiatives, the U.A.E. is focusing on combatting water insecurity in the developing world. Earlier this year, the U.A.E. established the **Mohamed bin Zayed Water Initiative**, intended to expand the scope of international cooperation on water scarcity issues. The initiative includes a \$150 million investment, outreach programs, and a five-year global competition involving the private sector designed to provide widespread access to clean water.

The U.A.E. is also working with international partners and research institutions that link space exploration and food security. The U.A.E.'s Mars 2117 project aims to establish the first inhabitable human settlement in Mars by 2117. The strategy includes the Mars Scientific City which will comprise laboratories for food, energy, and water. The U.A.E. plans on conducting agricultural testing and studies about food security. **As early as 2019, NASA expressed interest in working with the U.A.E. on the linkages between food security and space due to the U.A.E.'s leadership on this issue.**

U.S.-U.A.E. Private Sector Collaboration and Opportunities



Amazon Middle East Fulfillment Hub

The U.A.E. is committed to catalyzing private sector investment into its food security sector. U.S. companies are poised to play a key role in transforming the U.A.E. into a global hub for food systems innovation. **The United States is one of the four leading suppliers of consumer-oriented agricultural products to the U.A.E.** and contributes more than \$1 billion to the food sector. This collaboration is expected to continue as the U.A.E. focuses on accomplishing the ambitious goals outlined in the National Food Strategy 2051.

Amazon is collaborating with **ADIO** to construct the U.A.E.'s most technologically advanced fulfillment center in Abu Dhabi. Spanning 175,000 square meters, this facility is scheduled for completion in 2024 and is poised to offer local entrepreneurs and retailers access to new markets. Amazon has expanded its presence in the U.A.E. with a newly opened center in Dubai, increasing its total capacity in the region by 70 percent and contributing to the growth of the food logistics sector in the U.A.E. This facility boasts a storage capacity of nearly 60,000 cubic meters. Amazon's projects in the U.A.E. will help support local manufacturing and boost local food production. With 568 predominantly small- and medium-sized food and beverage processors, the U.A.E. hosts over 2,000 food and beverage manufacturing companies that generate \$7.63 billion in annual revenue, creating opportunities for commercial partnerships with the U.S. private sector.

The formation of AGWA, just the second in a series of Abu Dhabi ecosystem clusters, signals the importance the U.A.E. places on driving private capital to food security innovation. The AGWA food cluster will build on the successes of projects like the Abu Dhabi Food Hub and present investment opportunities for U.S. companies seeking a foothold in this emerging sector. U.S. companies joining AGWA will access an integrated cluster that includes advanced infrastructure, funding access, skilled talent, and partnerships with government entities, R&D institutions, and academia. U.S.-



AGWA partners with key government stakeholders to build robust regulatory framework - *Source: aletihad*

based Believer Meats has announced a partnership with AGWA to establish a regional headquarters in Abu Dhabi. AGWA and **Believer Meats** will also explore establishing a Believer Meats Innovation Academy dedicated to sustainable food technologies and developing future talent in collaboration with Abu Dhabi-based universities and research centers

On the vertical farming front, U.S.-based companies **Crop One** and **Aerofarms** have partnered with Emirates and Silal to scale up vertical farming in the U.A.E. U.S. startup **Plenty** recently announced a joint venture with **Mawarid** to invest in a major indoor vertical farm in Abu Dhabi. The joint venture plans to develop up to five farms in the next five years and will help boost U.A.E. domestic production of fruit. The joint ventures support the technological innovation and R&D pillars of the strategy.

One of the main mechanisms for bilateral private investment in food security is the U.S.-U.A.E. AIM for Climate initiative. Established in 2021, the initiative promotes investment in climate-smart agriculture and food systems innovation. **One of the key aims for AIM Climate is to entice private capital to develop climate smart technologies and bolster food production, two keys aims of the U.A.E. national strategy.** The U.S. and U.A.E. announced at COP29 that the partnership has reached \$29.2 billion. Innovation Sprints, projects that rely on self-financed investment from non-governmental projects, are one catalyze for U.S. and U.A.E. companies to collaborate on food security-related projects that boost production. **Google, Pepsico, and Al Dahra** are partners on an innovation sprint that seeks to transition large agricultural landscapes to regenerative agriculture by 2030.

Beyond partnerships and collaboration focused on food production and agritech, one key collaboration opportunity is the logistics sector. In order for the U.A.E. to become food secure, become a global leader in food security, and bolster global food production, securing supply chains and building logistics infrastructure is essential. Dubai recently announced a plan to develop the world's largest logistics hub for the trade of foodstuffs, vegetables, and fruits. In Abu Dhabi, **Etihad** Cargo and Abu Dhabi Airports recently signed a memorandum of understanding with Abu Dhabi Food Hub to create **Fresh Corridor 2.0**, an origin-to-destination air corridor for perishable foods. The launch of the Fresh Corridor 2.0 will encourage 2-way food trade between the U.A.E. and the rest of the world, including the United States, by bringing food products into the U.A.E.

Overall, food security is a promising sector for U.S.-U.A.E. collaboration, innovation, and joint investment. U.S. agtech companies interested in establishing a presence in the U.A.E. may do so at one of the physical spaces such as Dubai Food Tech Valley or the new AGWA cluster. This allows U.S. companies, particularly startups, to co-locate with U.A.E. partners and partner on agricultural innovation. Companies focused on manufacturing, reprocessing, and repackaging can also establish facilities in free zones linked to the ports in Abu Dhabi and Dubai like KEZAD or JAFZA. There are also opportunities to partner with ADQ and its subsidiary companies as they seek to ramp up activity in line with the U.A.E.'s National Food Strategy. **New initiatives, such as ATRC's agritech venture and FoodTech Challenge**, highlight the opportunities the U.A.E. presents in this sector, especially at the intersection of technological innovation. Finally, Gulfood and Abu Dhabi Agriculture and Global Food Week are world-renowned conferences for thought leadership and networking.

A prior report on the U.A.E.'s food security report was published by the U.S.-U.A.E. Business Council in 2021. Please see [here](#) for the previous report for reference.

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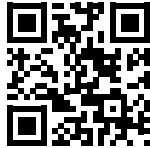


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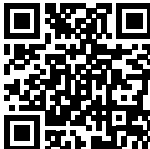


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