

UAE's FOOD SECURITY LEAP

Targeting a Top 10 Spot in the Global Food Security Index





The UAE economy continues to demonstrate outstanding performance under effective leadership and strategic directives. The realized indicators and significant outcomes underscore the nation's advancement towards the objectives of the 'We the UAE 2031' vision. This vision aspires to elevate the country's GDP to AED 3 trillion in the forthcoming years and foster a transition towards an innovative and diversified economic model.

Yet, a major challenge in realizing this vision is elevating the country to the top 10 of the Global Food Security Index (GFSI).

UAE's Economic Progress



GDP Growth Index

UAE's GDP secures the 5th largest economy position in real GDP growth index globally



In 2023, the GDP stood at AED 1.68 trillion at constant prices, marking a 3.6% increase from 2022



Non-oil GDP

The non-oil GDP reached AED 1.25 trillion, reflecting a 6.2% growth compared to 2022



Consolidated Fiscal Balance Surplus

AED 61 billion in the first nine months of 2023 (4.4% of GDP)



PMI

56.6 in January 2024, indicating robust economic activity



Forecasted GDP Growth



Wage Growth Increase

7.4% in Q4 of last year



Private Sector Employment Increase

3.1% in Q4 of last year

GDP Growth





We the UAE 2031

'We the UAE 2031' aims to transform the UAE's future vision into a tangible reality. Accordingly, all institutions in the UAE strive to realize this goal, paving the way for the achievement of the UAE Centennial Plan 2071 and the Principles of the 50.

The vision aspires to double the country's GDP from AED 1.49 trillion to AED 3 trillion. This ambitious target will be achieved through a series of strategic goals outlined in the vision

Economic Growth



- Generate AED 800 billion in non-oil exports.
- Raise the value of the UAE's foreign trade to AED 4 trillion.

Tourism and Quality of Life

- Raise the contribution of the tourism sector to the GDP to AED 450 billion.
- Position Emirati cities among the best 10 cities globally in quality of life.

Legislation and Safety



- Rank 1st globally in developing proactive legislations for new economic sectors.
- Position the UAE as first in the 'safety' index.
- Position the UAE among the top 3 countries in the 'Global Cybersecurity Index'.

Talent Attraction





Highlighted Global Rankings



- Rank the UAE as one of the top 10 countries globally in the 'Human Development Index'.
- Rank the UAE as one of the top 10 countries globally in the quality of healthcare.
- Position the UAE among the top 10 countries in the 'Global Food Security Index'.

A major challenge in realizing this vision is elevating the country to the top 10 of the Global Food Security Index (GFSI). In 2022, the UAE was ranked first in the MENA region and 23rd globally on the GFSI, marking a significant rise from 35th in 2021. Despite this impressive progress, securing a spot among the top 10 in the GFSI remains a persistent challenge.



Key Challenges of Food Security in the UAE

The significant barriers to food security in the UAE include:





Land Desertification

The unique challenges of the Arid regions are characterized by rainfall scarcity and a severe lack of available water, which makes it difficult for most plant and animal life to thrive.



Shrinking Freshwater Resources

The agricultural and forestry sector, despite contributing less than 0.1% of the UAE's GDP, accounts for around 73% of the nation's freshwater demand, exacerbating water scarcity



Climate Change

- Rising temperatures
- Growing pressures from climate change phenomena on food and water availability





Dependence on Imports

The UAE imports around 85-90% of its food supply.



Growing Population

The population, forecasted to reach 11 million by 2050, is expected to increase the strain on food availability.

To address these challenges, the UAE has launched the ambitious National Strategy for Food Security. This initiative aims to position the UAE as the global leader in the Global Food Security Index by 2051 and within the top 10 countries in the near future. The strategy seeks to establish a comprehensive national system that promotes sustainable food production through advanced technologies and enhances local output.



The UAE has been dedicated to bolstering food security through various measures and decisions that support the National Food Security Strategy 2051, aiming to ensure sustainable, long-term food security.

Current State of Food Security in the UAE



Legislation and Governance

Federal Law No. 3 of 2020

■ Regulates the strategic stock of food commodities, aiming to manage food reserves during crises, emergencies, and disasters.

Emirates Council for Food Security (2019)

- ▼ Purpose: Strengthen governance of food security between various authorities.
- Goals: Achieve national strategy for food security, quality, export and import, and database development.



Leadership and Social Responsibility

Minister of Future Food Security (2017)

■ In 2017, for the first time the UAE Government established a State Ministry for Food Security, which became FAO's line Ministry by June 2019. The new Minister has led the new UAE National Food Security Strategy 2051, and focused on the development of the necessary infrastructure that would achieve the country's food security objectives, in line with UAE Centennial 2071 Plan.

Emirates Food Bank (2017):

- ▼ Collects surplus food from various sources and distributes it to the needy locally and internationally.
- Aims to reduce food waste and promote the values of giving and social responsibility.



Technological Advancements

Food Technology Valley Project (2022):

- A significant step to enhance food security and agricultural technology.
- Focuses on innovative agricultural methodologies, such as indoor farming and vertical farming.
- Aims to enhance self-sufficiency and food security.





Electronic Food Research Platform

- Launched by the Food Security Office, the first platform of its kind in the region.
- Aims to create a knowledge base for scientific and applied research on food security in the country.
- ▼ Focus Areas Include:
 - Biodynamic farming technology
 - Agricultural waste recycling
 - ▼ Alternative foods
 - ▼ Energy and biomaterials
 - ▼ Food chain technology
 - ▼ ICT in agriculture
 - New farming methods
 - Robotics

18%

UAE's contribution to the region's total food trade

26%

UAE's contribution to the region's food exports

75.2

UAE's score on the Food Security Index

The UAE's National Food Security Strategy 2051 underscores the country's commitment to bolstering food security. Significant advancements have been made in integrating advanced technology into key sectors to enhance services, promote societal well-being, and strengthen food security. The UAE accounts for over 18% of the region's total food trade and contributes more than 26% of the region's food exports. Globally, the UAE has improved its food security ranking by 12 places since 2021, achieving impressive scores in food availability and safety. The country attained a score of 75.2 on the food security index, marking substantial progress from the previous year.



UAE's Vision for Food Security

National Food Security Strategy 2051

In November 2018, the UAE unveiled the "National Food Security Strategy 2051" that aspires to make the UAE top of the Global Food Security Index by 2051 while addressing the unique challenges of food security. The strategy aims to secure food supplies and boost agri-business trade through advanced technology, global partnerships, and effective policies. Additionally, it focuses on enhancing nutrition and reducing food waste.

Strategic Directions

Facilitate global agri-business trade and diversify international food sources



Contribution of strategic investments from overall imports



Secured target alternative international sources

Enhance sustainable technology-enabled domestic food supply across the value chain



Yield improvement from new technology-enabled production



Increase in production of selected strategic food items

Reduce food loss and waste



Reduction of food loss and waste

Sustain food safety and improve nutritional intake



Reduction in food safety incidences



Reduction in consumption of unhealthy food elements

Enhance capacity to respond to food security risks and crises



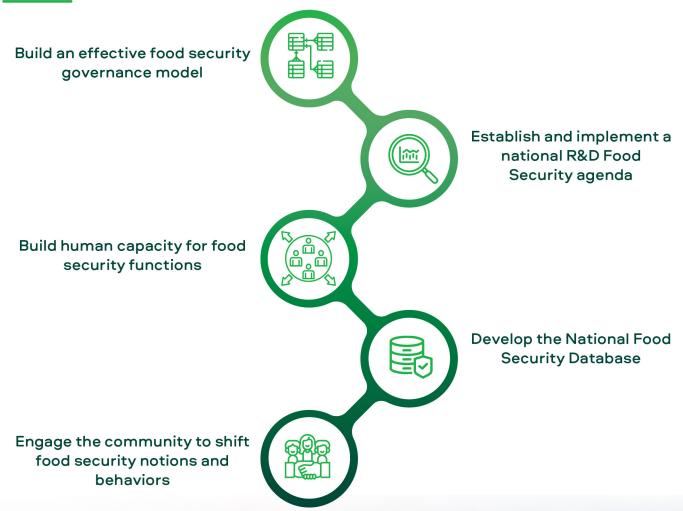
Successful completion of emergency drills



Achievement of reserve targets for 6 priority food items



Enablers







Family businesses make up around

90%

of the total number of private companies in the UAF

Approximately

60%

of the **UAE's GDP** comes from family businesses

The UAE hosts

21

of the Middle East's most powerful family businesses,

including Al Futtaim, Al Ghurair, and Al Majid.

The UAE offers a favorable business climate for family businesses, with stock-exchange listings recently approved.

The DIFC Family Wealth Centre provides succession and tax planning opportunities in line with the new Family Arrangements Regulations.



Current Role of Leading Family Businesses in the Agriculture & Food Value Chain

Agriculture Services

Producers & Manufacturers



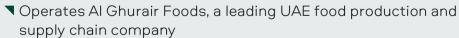


- Partnering with the government to promote sustainability
- Preserving Al Ain Oasis
- Expanding green spaces with eco-friendly products.



- Primarily focused on egg production and trading
- Plans to expand broader agricultural services





■ Aligns operations with the National Food Security Strategy 2051



- Entered the food industry in 1972 with the Dubai Co-operative Society
- Created Al Islami Foods in 1981
- Provides authentic Halal food for over 30 years



■ Invested in Fresh-To-Home is the largest global e-commerce platform for fish and meat



- Manufacturing facilities covering:
 - **▼** Meat
 - Seafood
 - Himalayan pink salt
- Herbs and spices
- Sausages and cold cuts
- Butchery and marination



- Known for brands like Oasis, Lacnor, and Blu
- Over 48 years of experience
- Employs 4,500+ staff
- Exports to 40+ countries



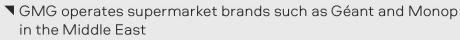


- Serves 770,000+ customers daily Employs 37,000+ people

- Sources 80% of products locally.



- GMG covers the entire food consumption chain
- Home-grown brands
- **▼**Food retail stores
- Products like meat, seafood, and spices



■ Recently acquired 22 Aswaag supermarkets, expanding their retail network.



- Operates 51 stores in the UAE
- Known for freshness and excellent customer service

Retailers



Family Enterprises and the Agri-Food Value Chain

Navigating the Agri-Food Value Chain

Agriculture Production

- Farming Inputs: Seeds, fertilizers, pesticides, water and machinery.
- Cultivation Practices: soil management, planting, irrigation, pest control and harvesting.

Enablers

Use of local and regional food systems

Integrate Agri-tech. to ensure optimal agricultural production

Market studies at the crop level to enable investments

Processing and Manufacturing

- ▼ Primary Processing: basic processing such as milling, cutting and drying.
- Secondary Processing: turning raw ingredients into finished products (.g. bread and dairy products).

Enablers

Robust quality management systems

Improved Processing Methods such as On-farm Processing

1

2

Post-Harvest Handling

- Sorting and Grading: categorizing crops by size, quality and ripeness.
- ▼ Cleaning & Packaging: cleaning crops and package them for transportation.

Enablers

Cold Chain Infrastructure: Prevent spoilage with optimal storage temperatures

Automated Sorting and Grading Systems

Use sustainable packaging

3



Retail and Marketing

- Wholesalers: selling products in bulk to retailers, institutions, or exporters.
- **▼ Retailers:** supermarkets, grocery stores, and farmers' markets.

Distribution and Logistics

- **▼ Transportation:** moving goods from farms and processing facilities to retailers/ customers.
- **Warehousing:** storing products in temperature-controlled environments to maintain freshness and quality.

Enablers

Operations analytics to forecast demand

Digital Platforms to integrate with retailers and institutions.

Enablers

Traceability systems and technologies

Establishing optimal supply chain management with state-of-the-art warehouses that includes climate control and specialized storage solutions

Consumer

▼ Purchase and Consumption: consumers buy and consume food products.

Enablers

Customer reviews to feed into the agriculture production process (i.e. integrating customer feedback from farm to table)

Customer analytics to segment market



Mastering the Agri-Food Value Chain

Strategies for Family Businesses in the Agri-Food Sector

Public-Private Collaboration

Foster collaboration between government and private sector to develop effective operating models and facilitate investments in agricultural projects, infrastructure, and technology.

Business Model Revamp

Revamping business models can help agri-businesses stay competitive and adapt to market changes.

Sustainable Practices Adoption

Address the impact of agriculture on sustainability and climate change through green initiatives.

Working Capital Optimization

Optimizing working capital is essential for agri-businesses to maintain liquidity and fund growth initiatives.

Robust HR Infrastructure

- Establish robust HR frameworks to attract, retain, and develop talent.
- Provide training on best practices in human resource management and employee engagement.

Preparing for IPO

Preparing for an IPO can provide agri-businesses with access to capital markets and funding opportunities.



Resilient Supplier Models

- Strategic Partnerships: Developing long-term partnerships with key suppliers.
- Local and Global Sourcing: Diversifying sourcing strategies to include local and international suppliers.
- **Joint Innovation:** Working together with suppliers to co-develop innovative solutions.

Efficient Operating Models

- Farm Management and Planning, for example, implementing crop rotation and planning, using data-driven techniques such as GPS, sensors, and drones for precise planting, irrigation, fertilization, and pest management.
- Resource Management, for example employing efficient irrigation systems like drip irrigation and soil moisture, using renewable energy sources and energy-efficient, applying fertilizers and nutrients based on soil testing and crop requirements.
- ▼ Technology Adoption, for example incorporating automation for tasks such as planting, harvesting, and packing, utilizing IoT devices and analytics to monitor crops, machinery, and environmental conditions.



Meet the Contributors

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