Food policy monitoring
in the Near East and North Africa region

Gender equality and women’s empowerment for inclusive food systems transformation
Food policy monitoring
in the Near East and North Africa region

Gender equality and women’s empowerment for inclusive food systems transformation

Food and Agriculture Organization of the United Nations
Cairo, 2024
## CONTENTS

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acronyms and abbreviations</td>
<td>vi</td>
</tr>
<tr>
<td>Summary</td>
<td>viii</td>
</tr>
</tbody>
</table>

### Section I: Food markets and food security situation

- Global food markets               | 1   |
- Inflation eases in most regional economies | 3   |
- Crop conditions: deficit rains in North Africa
  - Palestine                      | 8   |
  - Regional food security situation| 9   |

### Section II: Regional food policy-related developments

- Algeria                           | 11  |
- Bahrain                           | 12  |
- Egypt                             | 12  |
- Iraq                              | 14  |
- Jordan                            | 14  |
- Lebanon                           | 15  |
- Mauritania                        | 15  |
- Morocco                           | 16  |
- Oman                              | 17  |
- Qatar                             | 17  |
- Saudi Arabia                      | 18  |
- The Syrian Arab Republic          | 19  |
- Tunisia                           | 19  |
- United Arab Emirates              | 20  |
ACKNOWLEDGEMENTS

This report was prepared by the lead of Tamás Vattai of the Food and Agriculture Organization of the United Nations Regional Office for Near East and North Africa (FAO RNE), with contributions by Youssef Yousri, under the guidance of Ahmad Mukhtar and the overall leadership of Abdul Hakim Elwaer. Maggie Refaat provided input for the gender focus section. Mariam Hassanien coordinated the publishing process.

Design by Angham Abdelmageed.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAFSA</td>
<td>Abu Dhabi Agriculture and Food Safety Authority</td>
</tr>
<tr>
<td>AI</td>
<td>artificial intelligence</td>
</tr>
<tr>
<td>AIM for Climate</td>
<td>Agriculture Innovation Mission for Climate</td>
</tr>
<tr>
<td>Agritech</td>
<td>agricultural technology</td>
</tr>
<tr>
<td>API</td>
<td>Arab Planning Institute</td>
</tr>
<tr>
<td>AGOA</td>
<td>African Growth and Opportunity Act</td>
</tr>
<tr>
<td>BTS</td>
<td>Tunisian Solidarity Bank</td>
</tr>
<tr>
<td>CHC</td>
<td>Climate Hazards Center</td>
</tr>
<tr>
<td>CHIRPS</td>
<td>Climate Hazards Group InfraRed Precipitation with Station</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of the Parties</td>
</tr>
<tr>
<td>COP26</td>
<td>26th United Nations Climate Change Conference</td>
</tr>
<tr>
<td>COP28</td>
<td>28th United Nations Climate Change Conference</td>
</tr>
<tr>
<td>DAP</td>
<td>diammonium phosphate</td>
</tr>
<tr>
<td>ESP</td>
<td>Ensemble streamflow prediction</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FAO RNE</td>
<td>Food and Agriculture Organization of the United Nations Regional Office for the Near East and North Africa</td>
</tr>
<tr>
<td>FFPI</td>
<td>FAO Food Price Index</td>
</tr>
<tr>
<td>FEWS NET</td>
<td>Famine Early Warning Systems Network</td>
</tr>
<tr>
<td>FLDAS</td>
<td>Land Data Assimilation System</td>
</tr>
<tr>
<td>FAOSTAT</td>
<td>Food and Agriculture Organization's Statistics Database</td>
</tr>
<tr>
<td>FPMA</td>
<td>FAO Food Price Monitoring and Analysis Tool</td>
</tr>
<tr>
<td>GASC</td>
<td>General Authority for Supply Commodities, Egypt</td>
</tr>
<tr>
<td>GCC</td>
<td>Cooperation Council for the Arab States of the Gulf</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GEFS</td>
<td>Climate Hazards Group InfraRed Precipitation with Station</td>
</tr>
<tr>
<td>ICARDA</td>
<td>International Center for Agricultural Research in the Dry Areas</td>
</tr>
<tr>
<td>IGC</td>
<td>International Grains Council</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IPC</td>
<td>Integrated Food Security Phase Classification</td>
</tr>
<tr>
<td>IPO</td>
<td>initial public offering</td>
</tr>
<tr>
<td>JRC MARS</td>
<td>Joint Research Centre on Monitoring Agricultural Resources Bulletin</td>
</tr>
<tr>
<td>MoU</td>
<td>memorandum of understanding</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MERRA-2</td>
<td>Modern-Era Retrospective Analysis for Research and Applications, Version 2</td>
</tr>
<tr>
<td>ML</td>
<td>machine learning</td>
</tr>
<tr>
<td>NAP</td>
<td>national adaptation plan</td>
</tr>
<tr>
<td>NAQUA</td>
<td>National Aquaculture Group</td>
</tr>
<tr>
<td>NENA</td>
<td>Near East and North Africa</td>
</tr>
<tr>
<td>NMME</td>
<td>North American Multi-Model Ensemble</td>
</tr>
<tr>
<td>PDH</td>
<td>polycarbonate drying houses</td>
</tr>
<tr>
<td>SALIC</td>
<td>Saudi Agricultural and Livestock Investment Company</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SMEs</td>
<td>small and medium-sized enterprises</td>
</tr>
<tr>
<td>SRTF</td>
<td>Syria Recovery Trust Fund</td>
</tr>
<tr>
<td>TRA</td>
<td>Telecommunications Regulatory Authority</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>US FDA</td>
<td>United States Food and Drug Administration</td>
</tr>
<tr>
<td>WASDE</td>
<td>World Agricultural Supply and Demand Estimates</td>
</tr>
</tbody>
</table>
SUMMARY

Global food prices have continued their downward trend in recent months, falling back by almost a third from their peak in 2022 by February 2024. International wheat and corn prices have also eased, though they still remain above their pre-COVID levels; however, international rice prices have been climbing to new heights recently.

Inflation continues to ease in most regional economies; the IMF (International Monetary Fund) forecasts a 14.4 percent inflation for the Near East and North Africa (NENA) region for 2024. Domestic staple food prices remain elevated in the region: the food consumer price index was approximately 11 percent at the beginning of March 2024. However, in most countries of the region, prices exhibit a steady or decreasing trend, with the exception of Jordan, Libya, Mauritania, Oman, the Sudan and the United Arab Emirates, where they exhibit a moderate acceleration.

Crop conditions in the region are affected by rain deficits, which have hindered wheat development across North Africa, including Algeria, Libya, Morocco and Tunisia. Persistent dryness has continued in north-western parts of the region, negatively impacting wheat crops for the third consecutive year. In Egypt, conditions for wheat development are good, and the Nile Flood season rice harvest finalized well in January 2024. The United States Department of Agriculture (USDA) foresees a decrease of almost 3 percent in wheat production in Northern African countries for 2023/24 compared to 2022/23; this is expected to somewhat increase the 2023/24 import requirements. In the Near East, agroclimatic conditions remain generally favourable, with an increase of 19.2 percent in predicted wheat production and a consequent 12.1 percent decrease in import requirements for 2023/24 compared to 2022/23.

In the Gaza Strip, the entire population (approximately 2.2 million people) is experiencing acute food insecurity (Crisis or worse), 50 percent of the population (1.17 million people) is projected to be classified at the Emergency level, and at least one in four households (more than half a million people) is living at the Catastrophe or Famine level. During the first 3 months of the war, 70 percent of the average agricultural gross production value per household was lost; the war has destroyed approximately 43 percent of the croplands as of mid-February 2024. An immediate ceasefire and peace are prerequisites for food security. Delivery of FAO’s humanitarian aid requires unimpeded access to its humanitarian imports. FAO aims to reactivate the local production of perishable, highly nutritious food that cannot be imported.

The food security situation remains dire in many other countries in the region due to the effects of conflict (the Sudan, the Syrian Arab Republic and Yemen), climate-induced calamities (Libya), economic crises (Lebanon) and elevated food prices (Djibouti and Mauritania).

To increase food security, countries in the region have continued to diversify their food supply (Algeria, Morocco and Tunisia: cheaper Russian wheat, Jordan: Romanian wheat), livestock imports (Algeria: Irish beef and Spanish poultry) and trade routes amid disruptions in the Red Sea trade corridor. The new Arab Trade Line now connects the Red Sea to the Mediterranean Sea. Morocco has recently developed new maritime connections to North America and the

---

1 This Bulletin is intended to cover the countries of the Near East and North Africa (NENA) and Arab region: Algeria, Bahrain, the Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, the Sudan, the Syrian Arab Republic, Tunisia, the United Arab Emirates and Yemen. The terms NENA region and Arab region are used interchangeably.
United Kingdom to facilitate fruit and vegetable exports. Mauritania has regained its trade benefits under the African Growth and Opportunity Act (AGOA) granting duty-free, quota-free access to the American market.

To stabilize domestic food markets, governments have continued to introduce or prolong export bans (Egypt: sugar; Saudi Arabia: strawberries). Mauritania’s decision to triple transit fees on Moroccan fruit and vegetables comes after Morocco’s restrictions on exports to West Africa due to drought-induced shortages. Due to the scarcity of foreign exchanges, nations are experimenting with barter trade (Egypt: tea from Kenya).

Countries are also expanding domestic food and feed production (Algeria: oilseeds; Egypt: fruits and vegetables; Iraq: poultry and wheat flour; Morocco: carob, olives and semolina; Oman: feed for aquatic organisms; and Saudi Arabia: seafood). They have also increased domestic procurement prices (Egypt: wheat) and pursued consumer subsidies (Egypt: increased sugar rations) and domestic food reserves. Jordan and Iraq are creating a research and conservation facility for local plant seeds. Lebanon is promoting agri-entrepreneurship by empowering youth to foster innovative solutions. Morocco has launched new projects under the Generation Green Agricultural Strategy. Saudi Arabia is developing its apiculture by establishing bee clinics nationwide and expanding agritourism and ecotourism to boost and diversify farmers’ income.

The region is also scaling up advanced agricultural technologies. Egypt is conducting complex laboratory tests remotely to promote market access in the United States. Oman is using satellite image data for environmental monitoring and resource and disaster management. Saudi Arabia is using artificial intelligence and machine learning to optimize resource management, monitor crop and soil health and digitize agriculture processes, along with indoor vertical farming and biotechnology. Tunisia is using the application of drones to assess the hydration levels, soil quality and overall health of crops, and is increasing finance for agrifood systems transformation.

Arab nations are also devoting additional financing to food systems: Algeria provided fully subsidized credit for agricultural farmers and breeders; Egypt exempted defaulters from paying interest; Jordan increased investment in agricultural manufacturing and technology; and Tunisia allocated new funds to input subsidies for seeds and fertilizers.

Countries are combatting the impacts of climate change through afforestation (Bahrain in the framework of the Middle East Green Initiative), compensating farmers affected by floods (Iraq) and using drought-tolerant crop varieties (Iraq: wheat and vegetables; Jordan: olive oil; and Morocco: cereals). Lebanon is expanding vermicompost production using organic waste to enhance climate resilience while reducing dependence on chemical fertilizers. Organic farming is also gaining momentum in Saudi Arabia to meet the rising demand. Tunisia is strengthening the resilience of the cereals sector to external shocks and climate change. Countries also use international cooperation in adopting climate-smart agricultural technologies (Oman in collaboration with South Korea).

To meet the water demand, the region is expanding desalination capacities (Algeria, Morocco and Tunisia) and increasing the application of modern irrigation technologies (Iraq, Morocco and Oman). Morocco prohibited watermelon cultivation to reduce water use. Morocco and the United Arab Emirates are expanding the transformation of organic waste into compost to augment water retention and enhance soil quality; they are also working on increasing the use of treated wastewater in agriculture.
The Gulf States continue to invest in agricultural and food assets worldwide. United Arab Emirates-based companies have recently invested in berry farming in Uzbekistan and acquired a large Chile-based fruit supplier.

Agriculture was a major focus for the first time at the 2023 United Nations Climate Change Conference (COP28) in the United Arab Emirates in December 2023. Key outcomes that addressed agrifood systems and climate challenges include the Global Stocktake, the Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation and the Loss and Damage Fund, the Emirates Declaration on Sustainable Agriculture, Resilient Food Systems and Climate, and the Partnership on Water-Resilient Food Systems. Funding for a joint effort by the United States and the United Arab Emirates to advance climate-friendly farming around the world has grown to more than USD 17 billion at COP28 in the Agriculture Innovation Mission for Climate (AIM for Climate) initiative.

This issue of the bulletin focuses on the importance of gender equality and women's empowerment for inclusive food systems transformation in the region. The region has some of the widest gender gaps in the world, where profound gender inequalities persist in food security, access to assets, inputs, resources and technologies, and in women's participation in decision-making. Section III also presents FAO’s work on gender equality and women’s empowerment in the area with the aim of making the transformation of agrifood systems inclusive and gender-sensitive.
SECTION I: FOOD MARKETS AND FOOD SECURITY SITUATION

Global food markets

The FAO Food Price Index (FFPI) averaged 117.3 points in February 2024. World food prices peaked in March 2022 in the wake of the beginning of the war in Ukraine. Since then, they have fallen by 26.8 percent, although they remain well above pre-COVID levels (Figure 1).

Figure 1. FAO Food Price Index


2 The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of FAO concerning the legal status of any country, territory, or the delimitation of its frontiers or boundaries.
Policies such as export bans on rice, sugar and vegetable oil, and the recent disturbances in the Red Sea have exacerbated price volatility, often compounding the market impacts of the Ukrainian war.

Figure 2. International prices of wheat, corn and rice (USD/tonne)

![International prices of wheat, corn and rice](https://fpma.fao.org/giews/fpmat4/#/dashboard/tool/international)


International prices of wheat and maize have fallen significantly from their peak in May and April 2022 (respectively), while that of rice has been climbing to new heights recently (Figure 2). International prices of wheat (US No. 2, Hard Red Winter) and corn (US No. 2, Yellow) are 54 percent below their peak levels of 2022. There are, however, upside risks for international commodity prices as shipping disruptions in the Panama Canal, the Red Sea and many inland waterways could threaten established trade routes and alter the competitiveness of different origins, with implications for planting intentions for 2024 crops.

**Global cereal supplies in 2023/24 remain comfortable:** early production prospects of wheat in 2024 are favourable. FAO’s new forecast for world cereal production in 2023 has been raised marginally and now stands at 2.840 million tonnes, marking a 1.1 percent (30.4 million tonnes) rise compared to the previous year. This growth is primarily the result of a substantial increase in the forecast for world maize output (up 5.3 percent), which more than offsets a lower expected global wheat output (down 2.3 percent). Global rice production is expected to reach 526.2 million tonnes (milled basis) in 2023/24, up 0.4 percent from the 2022/23 level.

The World Bank natural gas index peaked in August 2022, but returned to its April 2021 levels by February 2024 (Figure A1, Annex). Prices of fertilizers, particularly nitrogen fertilizers, are significantly affected by natural gas prices as their production requires massive energy. The prices of fertilizers have fallen back since their peak in April 2022. In February 2024, diammonium phosphate (DAP) prices were down by 38.8 percent, urea prices by 62.0 percent.
and potassium chloride prices by 75.9 percent compared to their peak levels in 2022 (Figure A2). However, prices of all fertilizers are still above their levels in 2020.

FAO’s analysis of domestic staple food prices shows that high price levels persisted in February 2024. In most countries, domestic staple food prices remained elevated due to multiple factors including conflicts, insecurity, and extreme weather events, which have constrained food availability and access. Currency weakness remains a compounding factor, tightening supply, especially in net food importing countries, through reduced imports due to financial constraints and increasing debt burdens.

Inflation eases in most regional economies

The conflict in Gaza and Israel is yet another shock to the Middle East and North Africa (MENA) region. Projected growth in the region this year is downgraded by 0.5 percentage points to 2.9 percent by the IMF’s January 2024 Regional Economic Outlook. Inflation continues to ease in most regional economies. Still, inflation is proving persistent in some economies, largely because of country-specific factors, including those related to foreign exchange shortages (Egypt), and monetary financing and cost-push pressures (the Sudan). Inflation remains elevated in Lebanon. The IMF forecasts a 14.4 percent inflation for the region in 2024, a lower rate compared to 16.5 percent in 2023.

Based on the FAO Nowcasting Tool, the food consumer price index was 11.4 percent in the Near East and North Africa (16.8 percent) as of 6 March 2024. Within the region (Figure 3), the 6-month moving average food consumer price indices are as follows (as of 6 March 2024): Algeria (6.77 percent), Bahrain (3.41 percent), Djibouti (9.8 percent), Egypt (31.36 percent), Iraq (2.95 percent), Jordan (1.71 percent), Kuwait (5.25 percent), Lebanon (104.08 percent), Libya (5.02 percent), Mauritania (4.49 percent), Morocco (0.48 percent), Oman (3.30 percent), Palestine (34.73 percent), Qatar (7.92 percent), Saudi Arabia (2.48 percent), the Sudan (9.09 percent), the Syrian Arab Republic (22.38 percent), Tunisia (10.71 percent), the United Arab Emirates (6.27 percent) and Yemen (9.82).

![Figure 3. Expected year-over-year food price variation map](https://foodandagricultureorganization.shinyapps.io/dl_foodprices/)


Note: The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area is not yet determined.
In most countries of the region, food prices show a steady or decreasing trend, with the exception of Jordan, Libya, Mauritania, Oman, the Sudan and the United Arab Emirates, where they show a moderate acceleration (Figure 4) based on the FAO Daily Food Prices Acceleration Monitor.

**Figure 4. FAO Daily Food Prices Acceleration Monitor**


Note: The Daily Food Prices Acceleration Monitor developed by FAO’s Data Lab aims to detect abnormal growth/acceleration in daily food prices on a basket composed of 14 commodities derived from a crowdsourcing platform (Numbeo).

The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area is not yet determined.

**Crop conditions: deficit rains in North Africa**

Concerning crop conditions in the region, as rain deficits persist, there is concern for wheat development across much of North Africa, including in Algeria, Libya, Morocco and Tunisia despite some precipitation received in early January (Figure 5). Vegetation conditions in Morocco and western Algeria have been particularly impacted by the deficit rains. This is the third consecutive year with persistent dryness in north-western parts of the region; the increasing drought frequency negatively impacts wheat crops. In Egypt, harvesting of Nili season (Nile Flood) rice finalized in January while wheat crops continue to develop, and conditions remain favourable. In the Near East, agroclimatic conditions remain generally favourable. However, socioeconomic challenges relating to insecurity continue to impact agricultural production throughout Libya and Syria.
Harvesting of main-season cereals concluded in the Sudan under mostly poor conditions. Cereal production in 2023/24 was severely affected by the conflict through insecurity and low availability and high prices of agricultural inputs, which had a significant impact on planted and harvested area as well as yields. The national cereal production in 2023/24 (sorghum, millet and wheat) is estimated at about 4.1 million tonnes, 46 percent below the output obtained in the previous year. Sorghum output is estimated at about 3 million tonnes, 42 percent lower than the level of the previous year. Millet production is estimated at 683,542 tonnes, 64 percent lower than the output obtained in 2022. Production of wheat, to be harvested in March 2024, is forecast at about 377,900 tonnes, 21 percent below the previous year.

There is a poor seasonal rainfall performance in North Africa and in the middle of the Arabian Peninsula through at least mid-March (Figure 6). Due to earlier rainfall deficits and the below-average rainfall in recent weeks, Morocco, western Algeria and eastern Libya received only 45 to 75 percent of average amounts during the period from 1 December 2023 to 15 March 2024. Dry conditions are forecast across much of North Africa and the Arabian Peninsula, according to Climate Hazards Group InfraRed Precipitation with Station data (GEFS) 16-day forecast from 1 March 2024.
Figure 6. Percentage of average rainfall from 1 December 2023 to 15 March 2024


Note: An outlook for percent of average rainfall for the period of 1 December 2023 to 15 March 2024, based on Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) preliminary data for 1–28 February and a 16-day CHIRPS- Climate Hazards Group InfraRed Precipitation with Station data (GEFS) forecast from 1 March 2024. The average is the 1981–2023 CHIRPS average for this period obtained from the CHC Early Estimates. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area is not yet determined.

Based on the observed and forecast conditions of the Famine Early Warning Systems Network (FEWS NET) Land Data Assimilation System (FLDAS) Forecast model, crops will likely face below-normal root zone soil moisture levels (Figure 7) and atypically hot temperatures during the first half of 2024, which will likely exacerbate the impacts of the drier-than-average conditions.
Figure 7. Monthly root zone soil moisture forecast probabilities


Note: Ensemble streamflow prediction (ESP) based Soil Moisture Forecast, initialized on 1 February 2024. Probabilistic forecast for February 2024–June 2024 root zone soil moisture, based on the NASA Famine Early Warning Systems Network (FEWS NET) Land Data Assimilation System (FLDAS) Forecast model. Initial conditions for the FLDAS-Forecast model are generated by forcing the models with CHIRPS precipitation and MERRA-2 non-precipitation meteorological datasets. The outlook uses CHIRPS and the Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2) reanalysis data by NASA, and forecasted meteorological conditions are from the North American Multi-Model Ensemble (NMME) and the GEOSv2 model. These maps indicate the forecast probability (in percent) of the given hydrologic variable (e.g. root zone soil moisture) being in ‘Above Normal’ (>67 percentile), ‘Normal’ (between 33 to 67 percentile) and ‘Below Normal’ (<33 percentile).

The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area is not yet determined.

The USDA foresees almost 3 percent less wheat production (16.73 million tonnes) in Northern African countries for 2023/24 compared to 2022/23 (17.24 million tonnes) (Table 1). This will somewhat increase import requirements (by less than 1 percent) in 2023/24. In the Near East, the USDA predicts 19.2 percent higher wheat production and 12.1 percent less import requirements for 2023/24 compared to 2022/23.
Table 1. World wheat supply and use estimations for 2022/23 and 2023/24 (million tonnes)\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>2022/23 estimations</th>
<th>2023/24 projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning stocks</td>
<td>Production</td>
</tr>
<tr>
<td>World (^c)</td>
<td>272.75</td>
<td>789.17</td>
</tr>
<tr>
<td>N. Africa(^d)</td>
<td>12.31</td>
<td>17.24</td>
</tr>
<tr>
<td>Sel. Mideast(^e)</td>
<td>9.92</td>
<td>17.43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2022/23 estimations</th>
<th>2023/24 projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning stocks</td>
<td>Production</td>
</tr>
<tr>
<td>World (^c)</td>
<td>271.1</td>
<td>786.7</td>
</tr>
<tr>
<td>N. Africa(^d)</td>
<td>11.48</td>
<td>16.73</td>
</tr>
<tr>
<td>Sel. Mideast(^e)</td>
<td>11.76</td>
<td>20.77</td>
</tr>
</tbody>
</table>


Note: \(^a\) Aggregate of local marketing years; \(^b\) Total foreign and world use adjusted to reflect the differences in world imports and exports. \(^c\) World imports and exports may not balance due to differences in marketing years, grain in transit and reporting discrepancies in some countries; \(^d\) North Africa: Algeria, Egypt, Libya, Morocco and Tunisia; \(^e\) Selected Middle East countries: Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, United Arab Emirates and Yemen.

# Palestine

The people of Gaza are experiencing catastrophic levels of conflict-induced food insecurity and a high risk of famine, and that risk is increasing by the day. According to the latest Integrated Food Security Phase Classification (IPC) analysis, the entire population of approximately 2.2 million people in the Gaza Strip is estimated to be in Crisis or worse (IPC Phase 3\(^3\) and above), the highest percentage of people experiencing such acute food insecurity that the IPC has ever classified for any given area or country. Approximately 50 percent of the population (1.17 million people) is projected to be in Emergency (IPC Phase 4), and at least one in four households (more than half a million people) conservatively assessed to now be in Catastrophic or famine-like conditions (IPC Phase 5).

The intensification of the hostilities, further reduction in access to food, basic services and lifesaving assistance, and the extreme concentration or isolation of people in inadequate shelters or areas without basic services are major factors that increase this risk.

The war is causing massive collateral damage to agricultural livelihoods and food supplies in the Gaza Strip. Approximately 42.6 percent (6,694 ha) of all cropland in Gaza was damaged, with Gaza governorate accounting for the most damage (1,941 ha) as of 15 February 2024; 70 percent (USD 14,849) of average gross production value was lost per household in first three months of conflict, corresponding to 38 percent loss of total income. Home barns (307), broiler

\(^3\) The IPC Acute Food Insecurity (IPC AFI) classification provides differentiation between different levels of severity of acute food insecurity, classifying units of analysis in five distinct phases: (1) Minimal/None; (2) Stressed; (3) Crisis; (4) Emergency; and (5) Catastrophe/Famine.
farms (235) and sheep farms (203) are the most damaged. A total of 626 agricultural wells were damaged, with North Gaza (213) and Gaza (208) being the most affected governorates. Approximately 26.6 percent (339 ha) of greenhouses suffered significant damage, with Gaza and North Gaza being the worst affected.

An immediate ceasefire and peace are a prerequisite for food security. All parties must respect their obligations under international humanitarian and human rights law and protect civilians and objects indispensable for survival.

Delivery of FAO’s humanitarian aid requires unimpeded access to its humanitarian imports, which can be fully effective with the resumption of private imports, local production and trade.

Under the Humanitarian Flash Appeal, FAO aims to reactivate production of perishable, highly nutritious food that cannot be imported as food aid, including fresh milk, meat and vegetables. To that effect, FAO will assist 70 660 individuals.

In the Gaza Strip, FAO will:

- safeguard livestock and prevent the spread of diseases by delivering critical supplies to around 7 100 livestock-holding households, including animal fodder, shelters and health inputs (USD 4.7 million);
- restock lost livestock for approximately 3 000 households (USD 5.3 million); and
- provide time-critical assistance to approximately 3 000 farming households (USD 5 million).

In the West Bank, FAO will protect the resilience of vulnerable farmers and livestock holders affected by increased violence and movement restrictions by delivering USD 5 million in emergency aid.

Regional food security situation

In other parts of the region, conflict, economic crises, climate change and high food prices continue to be major drivers of food insecurity.

In Djibouti, approximately 250 000 people were estimated to have faced acute food insecurity (IPC Phase 3 and above) between March and June 2023, mainly due to the lingering impact of a prolonged and severe drought between late 2020 and early 2023, as well as high food prices.

In Lebanon, the economic crisis is the main driver of food insecurity. Between October 2023 and March 2024, approximately 105 million Lebanese locals, Syrian refugees, Palestinian refugees in Lebanon, and Palestinian refugees from the Syrian Arab Republic are classified in IPC Phase 3 (Crisis) and above, corresponding to 19 percent of the analysed population. Between April and September 2024, approximately 114 million people are expected to face high levels of food insecurity and are likely to be in IPC Phase 3 (Crisis) or above, corresponding to 21 percent of the population.

The 2024 Global Humanitarian Overview reports an increase in the number of people that need humanitarian assistance in Libya from 803 600 people in 2023 to 883 900 people in 2024 due to the devastation wrought by Storm Daniel.
In Mauritania, approximately 365,000 people are projected to be in need of humanitarian assistance during the June to August 2024 lean period, including approximately 7,100 people in IPC Phase 4 (Emergency). This would be an improvement compared to the previous year, mostly due to the increased cereal output in 2023. Elevated food prices continue to constrain food access for vulnerable households.

Conflict continues to be one of the major drivers of food insecurity in the region. The latest projection update of the Sudan reveals that intense conflict and organized violence, coupled with the continued economic decline, have driven approximately 17.7 million people (37 percent of the analysed population) into high levels of acute food insecurity, classified in IPC Phase 3 or above (Crisis or worse) between October 2023 and February 2024. Of those, approximately 4.90 million (10 percent of the population analysed) are in IPC Phase 4 (Emergency), and almost 12.83 million people (27 percent of the population analysed) are in IPC Phase 3 (Crisis).

In the Syrian Arab Republic, approximately 55 percent of the population, or 12.9 million people, are food insecure, of which 3.1 million are severely food insecure.

Currently, nearly half of the population in Yemen cannot meet the minimum needs of food consumption. From October 2023 to February 2024, approximately 45 percent of the population in Government of Yemen-controlled areas experienced high levels of acute food insecurity, classified as Crisis (IPC Phase 3) and Emergency (IPC Phase 4). Compared to the previous analysis for June to December 2023, the new update revealed a 12 percent increase in IPC Phase 3 and above. The increase in food insecurity was due to a worsening economic crisis, continued localized conflict, reduced and irregular humanitarian food assistance and the negative impacts of Cyclone Tej, which hit south eastern coastal areas of Yemen in the last weeks of October 2023.
SECTION II: REGIONAL FOOD POLICY-RELATED DEVELOPMENTS

Algeria

During the 2023/24 agricultural season, Algeria is gearing up to boost its soft wheat imports, aiming to reach approximately 7.2 million tonnes. This projection marks a notable 11 percent rise from the previous campaign, during which the nation imported approximately 6.5 million tonnes of this essential grain. As part of this strategy, Algeria secured a significant wheat supply from Russia, with plans to receive 2.5 million tonnes by June 2024. Algeria is Africa’s second-largest wheat market, heavily reliant on imports to meet domestic demand. The surge in wheat exports from Russia highlighted the competitive advantage of Russian wheat in terms of quality and price.

In a parallel initiative, Algeria embarked on diversifying its meat imports to mitigate domestic market price fluctuations, exemplified by the recent authorization of beef imports from Ireland. The arrival of Ireland’s first beef shipment in three decades signified a strategic shift in securing alternative livestock sources. This move aligned with Algeria’s broader agenda to fortify food security and economic resilience, especially following concerns about livestock diseases that led to the suspension of live cattle imports from France. Algeria also lifted its ban on the import of Spanish poultry products, marking the end of a 20-month crisis and the gradual restoration of bilateral relations.

The Algerian Council of Ministers, under the leadership of President Tebboune, has embarked on proactive measures to fortify the agricultural sector. These include establishing pilot farms for oilseed cultivation to boost local production and diminish reliance on imports. The country, which ranked third globally in soybean oil imports, aims to enhance domestic production. President Tebboune announced the launch of a soybean oil extraction project in Bazoul, Jijel.
spearheaded by Kotama Agrifood. Expected to yield 1,000 tonnes of crude oil and 4,000 tonnes of livestock feed daily, the project aims to cover 20 percent of the national edible oil market and satisfy 80 percent of the country’s livestock feed needs, aligning with Algeria’s broader strategy to achieve food self-sufficiency and leverage advanced technologies in the agricultural sector.

Over 199,000 farmers benefited from R’fig credit for the 2023/24 agricultural season, totalling nearly DZD 330 billion. The credit, fully subsidized by the State, supports farmers and breeders across more than 350 agricultural areas. Plans include expanding the network and offering new Islamic finance products to meet demand, alongside launching remote financing requests and expanding electronic payment services.

Algeria aims to boost its drinking water production capacity to meet the challenges of climate change. The Algerian Energy Company plans to deploy mobile seawater desalination stations from 2024 on, with a capacity of 2,500 to 2,700 cubic meters per day, targeting small towns and agriculture. Additionally, conventional desalination plants with a cumulative capacity of 1.5 million cubic meters are set to be constructed by December 2024.

Algeria donated 16,000 metric tonnes of fertilizer to Kenya. The donation comes as Kenya seeks to address its fertilizer needs (the country requires approximately 900,000 metric tonnes of assorted fertilizer annually to support food production).

Bahrain

In December, Tanmiah Food Company launched a tree planting campaign in Manama, the capital, with the goal of planting 100,000 trees. This initiative aligns with the Saudi Green Initiative and the Middle East Green Initiative, emphasizing collaborative environmental efforts between Saudi Arabia and Bahrain to combat the impacts of climate change through afforestation. Afforestation is vital for improving air quality, preventing soil erosion, supporting wildlife, absorbing carbon dioxide and mitigating the effects of climate change.

Egypt

Egypt’s food industry exports experienced a surge, reaching record highs in the first 9 months of 2023. This growth was predominantly driven by increased demand from Arab nations, marking a 14 percent increase compared to the same period in 2022. Notably, the Sudan emerged as a primary importer, demonstrating a remarkable growth rate of 164 percent.

In November 2023, the government introduced initiatives to support farmers, including exemptions for defaulting farmers from fines and interest payments.

Egypt took proactive steps to bolster domestic wheat production, offering incentives to farmers to sell to the state by increasing procurement prices. The Ministry of Agriculture highlighted the importance of wheat cultivation, with the planting of 3 million feddans between November 2023 and January 2024 (a year-on-year increase of almost half a million acres), amidst a 14.5 percent increase in wheat imports from 11 million tonnes in 2023 to 9.6 million tonnes in 2022. Egypt’s General Authority for Supply Commodities (GASC) announced that it aims to procure over 5 million tonnes of wheat in 2024 due to domestic consumption exceeding 20 million tonnes annually. Despite these efforts, the country faces significant challenges in grain
procurement strategies, with projections indicating its lowest wheat ending stocks in two decades. In January 2024, Egypt's Minister of Supply, Ali Al-Moselhi, confirmed the country's ample wheat reserves sufficient for 4.3 months after the purchase of 480,000 tonnes from Russia. He also ensured adequate sugar and vegetable oil reserves for 5.3 months.

Additionally, Egypt plans to construct six wheat silos in 2024, investing USD 145.6 million to boost storage capacity by 420,000 tonnes, financed partly by the French Development Agency. The goal is to increase state-owned wheat silo capacity to 6.4 to 7 million tonnes within 3 to 4 years, enhancing food security.

Innovative agricultural solutions, such as hydroponics, have emerged to enhance Egypt's food security and agricultural sustainability. These solutions address water scarcity and optimize resource utilization. Additionally, strategic investments in the food industry, like Mitsui & Co.'s acquisition of a stake in Wadi Poultry, underscore Egypt's commitment to economic diversification and expansion in the agrifood sector.

Amidst economic challenges including a scarcity of US dollars, a proposed barter trade system between Egypt and Kenya aims to provide an innovative solution to sustaining the tea trade by leveraging each country's comparative advantages.

Geopolitical tensions impacting energy supplies prompted the reduction in natural gas supplies to fertilizer companies.

In December 2023, Egyptian Nawah Scientific, the first Cloud Lab in the Near East and Africa, secured accreditation from the American Food and Drug Administration (US FDA). This accreditation will enable companies to conduct complex laboratory tests remotely and streamline export processes for Egyptian companies.

Egypt's Ministry of Supply and Internal Trade addressed sugar shortages by increasing the rations of subsidized sugar distributed to families. The government also extended the ban on sugar exports to stabilize domestic prices and safeguard domestic supply.

Egypt's Ministry of International Cooperation partnered with the World Bank Group to foster innovation in climate-smart agriculture to enhance the efficiency and environmental sustainability of its agricultural food systems.

The privately-owned Egyptian MAFI for Agricultural Produce Industries contracted with international agricultural companies to establish a USD 300 million food production complex in Sadat City in collaboration with international companies, such as JBT and Cabin Plant from the United States and GEA from Germany. It will produce orange and tomato concentrates, various fruit products and citrus oils and will boast freeze-drying facilities for fruits and vegetables. The complex aims to reach an annual production capacity of over 100,000 tonnes of agricultural food products in Phase I, with an estimated turnover of USD 200 million. In Phase II, the production capacity will reach 200,000 tonnes, equivalent to a turnover of USD 400 million.

Egypt shares its expertise in agriculture, irrigation and infrastructure with Angola to aid its development.
Iraq

In November 2023, Iraq initiated compensation payments of over IQD 175 billion (approximately USD 130 million) to address agricultural damages from floods and rains across several provinces (Basra, Maysan, Muthanna and Wasit).

Prime Minister Mohammed Shia Al-Sudani inaugurated Iraq's largest private poultry venture in Karbala. With an annual output capacity exceeding 3 billion eggs and 340 000 tonnes of meat, the project aligns with Iraq's goals of meeting domestic market needs and elevating animal husbandry practices. Additionally, Iraq, in collaboration with the Kurdistan Regional Government and the private sector, unveiled the Distar Factory—a state-of-the-art wheat flour mill in Domiz, Duhok Governorate. Furthermore, recent government measures, including the utilization of groundwater for farming, have led to a bumper harvest, doubling wheat cultivation to meet 80 percent of the country's bread consumption needs.

The growth rate of the agriculture sector is to be the highest among other economic sectors during the year 2022/23, at a rate of 29 percent. Key strategies of the government to develop the agriculture sector include transitioning towards modern irrigation technologies, developing new high-quality and productive crop varieties and livestock breeds, and adopting appropriate support and pricing policies. The Minister of Agriculture sets up campaigns to promote using drones to control agricultural pests. It also supports the development of varieties of different crops that are drought tolerant, most notably drought-resistant bread wheat and vegetables. According to FAO’s Representation in Iraq, the government is also establishing the National Programme for Preserving Wheat and Barley Seeds.

Jordan

Jordan's olive oil production is facing a dire situation due to climate change, impacting farmers who experienced a significant reduction in olive oil yield due to altered weather patterns and prolonged heatwaves. Digital climate modelling is predicting decline in olive yields by 2050, posing a threat to Jordan’s olive oil self-sufficiency and necessitating urgent adaptation strategies. In November 2023, the National Agricultural Research Centre explored adaptive measures, focusing on cultivating climate-resilient olive varieties like Mehras, which also has higher oil yield. Additionally, sustainable farming practices, such as supplementary irrigation and the use of potash fertilizers to mitigate water stress in olive trees during heatwaves, are being promoted.

In December 2023, the Ministry of Agriculture embraced cutting-edge technologies like remote sensing and artificial intelligence to protect the country’s forests from illegal logging and wildfires, in line with its 2022–2025 strategy focusing on climate change resilience. The ministry aimed to utilize remote sensing for efficient forest monitoring, combating deforestation and promptly addressing natural disturbances through a partnership with Growtech Company. Ground-based sensors complemented this effort by monitoring forest temperature, fires and logging activities in real-time, facilitating swift responses to incidents and reducing violations.

Jordan and Egypt agreed to activate a new maritime route between Aqaba and Egyptian ports on the Mediterranean Sea, offering alternative paths for trade amidst rising tensions in the Red Sea, including connecting the Red Sea to the Mediterranean Sea by land routes.
(Arab Trade Line). This route was expected to enhance Jordan’s competitiveness in supply routes, diversify trade routes and streamline the movement of exports to the United States and Europe. Despite disruptions in Red Sea shipping, Jordan assured the stability of over 90 percent of its wheat and barley imports, primarily sourced from Eastern European countries. Efforts were underway to explore alternative sea freight routes to maintain stable supplies of essential commodities.

Jordan increased its investment in the agricultural sector, with the Ministry of Industry, Trade and Supply allocating JOD 40 million (USD 56 million) to support sustainable growth and economic resilience. Initiatives include agricultural guidance, farmer collaboration, and investments in agricultural manufacturing and technology to address production surplus challenges and maximize the sector’s value. Through these integrated efforts, the agricultural sector contributes significantly to Jordan’s economy, ensuring food security, generating employment and supporting the green economy despite the water scarcity challenges.

In 2022, Jordan started building its first national seed bank. By January 2024, 30 percent of the work was already completed; the bank is expected to be operational in 2024. This initiative aligns with Jordan’s efforts to protect national food security by creating a research and conservation facility for local plant seeds. The focus will be on genetic resources related to food and agriculture. Jordan’s Hashemite University, in collaboration with the Ministry of Agriculture, is responsible for launching the seed bank, which began construction in 2022 in the capital city, Amman.

**Lebanon**

In December 2023, Lebanese entrepreneur Nada Ghanem founded Dooda Solutions, an agricultural technology company specializing in vermicompost products produced by earthworms. Recognizing the vital role earthworms play in soil fertility, Dooda Solutions manufactures vermicompost using organic waste, with products including soil and liquid fertilizers. It aims to enhance local food security and climate resilience, while reducing the dependence on chemical fertilizers. Supported by winning PepsiCo’s MENA greenhouse accelerator programme, the company plans to expand its reach across the NENA region.

In January 2024, the Arab Planning Institute (API) launched a project in Tripoli, Lebanon, aimed at promoting entrepreneurship and self-employment. The project focuses on training and empowering Lebanese youth to foster innovative and productive ventures in partnership with the Chamber of Commerce, Industry and Agriculture. The project includes training programmes, contests and support for establishing and maintaining private businesses to combat unemployment and empower the youth population and graduates in entrepreneurship and self-employment endeavours.

**Mauritania**

In November 2023, Mauritania was set to regain its trade benefits under the African Growth and Opportunity Act (AGOA) starting January 2024 following notable advancements in workers’ rights, as announced by the Office of the United States Trade Representative. AGOA, an American trade initiative, focuses on fostering trade and investment relationships between the United States and sub-Saharan African nations. It aims to bolster these countries’ economies through principles of good governance and free market competition. The programme provides
eligible countries with duty-free access to a wide array of over 1,800 American goods and services.

In January 2024, Mauritania decided to triple transit fees for Moroccan fruit and vegetables, increasing them from EUR 1,600 to EUR 4,600 at the Guerguarat border crossing. The decision comes against the backdrop of Morocco's prior restrictions on exports to West Africa due to domestic drought-induced shortages, which disrupted regional supply chains. The case hints at the importance of strengthening resilience by increasing reliance on alternative trade routes and suppliers.

**Morocco**

In November 2023, Morocco launched further projects under the Generation Green 2020–2030 strategy, designed to transform the agricultural sector, including a rural road development programme in Driouch, with an investment of MAD 58.14 million for 57 km of roads. In Douar Lahbara, the Integrated Rural Development Support Project includes the planting of 100 hectares of carob trees, future olive plantations, irrigation systems and road enhancements, benefitting 40,750 farmers. Meanwhile, in Nador province's Oulad Settout community, a project worth MAD 1.25 billion focused on connecting 13,500 hectares to localized irrigation systems, benefiting 3,325 farmers, aiming to bolster water supply security, crop productivity and regional economic growth, all contributing to Morocco's sustainable agricultural advancements.

Climate change continues to have a significant impact on Moroccan farmers, especially in regions like Fez-Meknes, where drought has become a structural problem. Farmers face challenges such as drying rivers and unpredictable weather patterns, prompting a shift towards more resilient production techniques. Strategies to fight climate change include adopting drought-resistant seed varieties, implementing drip irrigation and employing no-tillage systems for soil and water conservation.

Morocco saw a significant increase in soft wheat imports from Russia in 2023, with approximately 81,300 tonnes imported by December, making Russia Morocco's third-largest soft wheat exporter. This import surge reflects Morocco's efforts to diversify wheat sources amidst concerns about traditional suppliers’ reliability.

In December 2023, in response to water stress, the governor of Tinghir, Morocco, prohibited watermelon cultivation for the 2023/24 season to reduce water use, aligning with joint ministerial decisions. Watermelon cultivation had adverse effects on the water table, exacerbating drought in regions like Tata and the southeastern Kingdom.

A new maritime line, NAMEX, connects Morocco to North America, facilitating fruit and vegetable exports. Operated by CMA-CGM, this service strengthened Tangier Med port's position as a crucial hub, offering efficient logistics solutions with climate-controlled containers. Moreover, Dutch shipping company WEC Lines inaugurated a new route linking Morocco's Agadir with the United Kingdom's Port of Liverpool, meeting the rising demand for Moroccan tomatoes in the United Kingdom.

Addressing severe drought challenges, Morocco expanded seawater desalination facilities along its coasts, aiming for a capacity of 1.5 billion cubic metres by 2030. Projects like the Agadir and Dakhla seawater desalination plants, powered by wind energy, underlines Morocco's
commitment to diversifying agricultural water supplies sustainably. With nine desalination projects planned by 2027, Morocco is seeking international support for funding and technical assistance to enhance capacity for these initiatives.

In January 2024, Turkish company Alapala completed a state-of-the-art semolina production plant for Imandy Mills in Morocco, boasting a daily capacity of 240 tonnes to efficiently meet market demand.

Suez and the Azura Group have established platforms dedicated to converting organic waste into compost in Southern Morocco, aiming to produce 42,000 tonnes of compost and 43,000 tonnes of semi-finished Refuse Derived Fuel annually. This initiative promotes a circular economy, enhances soil quality and reduces carbon emissions by approximately 16,000 tonnes of CO₂ equivalent per year, while also benefitting the local economy by selling compost to farmers.

**Oman**

In November 2023, Oman’s Khazaen Economic City will house an animal feed factory worth USD 97 million, formed through a collaboration between the Omani Mills Group and Nakheel Oman Development Company. Located in Khazaen, the factory aims to produce specialized feeds for aquatic organisms with an investment cost of OMR 37 million. The factory will convert agricultural and biological by-products into value-added products, recycling date by-products like kernels, pulp and palm fronds. It plans to annually produce 100,000 tonnes of grass feed from agricultural residues enhanced with dates for domestic red meat and dairy production, along with 300,000 tonnes of marine life feed for shrimp and fish cultivation in cages. The use of local raw materials will support food security and aims to serve domestic and export markets.

In January 2024, the Telecommunications Regulatory Authority (TRA) issued a license to Oman Lens Company that permits the establishment of a ground station connected to a satellite network for monitoring, tracking and controlling satellites. The licence will facilitate the collection and analysis of satellite image data for various applications, including mapping, environmental monitoring, resource management, agriculture and disaster management.

**Qatar**

In November 2023, Qatar’s Ministry of Municipality led the development of a highly efficient irrigation system, reducing water usage by up to 45 percent for date palm cultivation. This initiative, part of the “Project to Develop Sustainable Production Systems for Date Palms,” introduced third-generation Polycarbonate Drying Houses to improve the quality of dates and reduce waste during drying. Overseen by the International Center for Agricultural Research in the Dry Areas (ICARDA), these advancements aim to optimize date production and address challenges in the GCC’s date sector.

In a broader effort to enhance water security and promote sustainable agriculture, Qatar targeted a 40 percent reduction in water consumption per tonne of crop produced by 2030. The Ministry of Municipality stresses the importance of water-efficient farming methods and advocates for the use of treated wastewater for animal fodder, aiming for 100 percent utilization by 2030.
In January 2024, The Ministry of Municipality in Qatar has initiated a project to develop “protected farms” and climate-smart agriculture in collaboration with South Korea. This project aims to convert open farm areas into closed farms to reduce evaporation, water loss and address soil issues. It will also include the development of drought-resistant crops and modern agricultural practices.

**Saudi Arabia**

In November 2023, Saudi Arabia’s National Aquaculture Group (NAQUA) aims to increase seafood production by over 400 percent in the following 7 years, as part of Saudi Arabia’s Vision 2030 plan for seafood self-sufficiency. Through a strategic partnership with the Saudi Agricultural and Livestock Investment Company (SALIC), NAQUA intended to boost its seafood output from 60 000 to 250 000 metric tonnes, addressing the domestic seafood market’s supply deficit.

Reef Saudi launched an innovative venture to establish bee clinics across major Saudi cities, empowering local beekeepers and strengthening the nation’s honey sector. Supported by the Ministry of Environment, Water and Agriculture, these clinics provide essential services such as examination, diagnosis and guidance to beekeepers, fostering self-sufficiency and increasing local bee colonies.

In another aspect of Saudi Arabia’s agricultural evolution, farmers in Tabuk embraced organic crop cultivation to meet the rising demand for safer, healthier food options. Transitioning to organic methods, utilizing natural fertilizers and eschewing synthetic inputs aligned with consumer preferences and reflected the region’s commitment to sustainable agriculture. Organic farming also gained momentum in the Asir region, aiming to promote sustainability and preserve natural resources.

In December 2023, FarmERP, a leading agritech company, expanded into the Saudi Arabian market to provide advanced technology solutions tailored to the agricultural sector’s needs. Leveraging cutting-edge technologies such as artificial intelligence (AI) and machine learning (ML), FarmERP aimed to enhance food security, optimize resource management, monitor crop and soil health, and digitize agriculture processes in Saudi Arabia. FarmERP seeks to empower local farmers and stakeholders to navigate the challenges posed by climate change and ensure long-term agricultural viability.

Saudi Arabia launched Dan Company, an organization under the sovereign wealth fund aimed at promoting and developing agritourism and ecotourism initiatives across the Kingdom. It aims to diversify the country’s economy and boost non-oil GDP by offering immersive experiences centred around traditional farming practices and eco-friendly tourism attractions while preserving its natural and cultural heritage.

Construction commenced on Saudi Arabia’s largest indoor vertical farming project in Riyadh. The project, spearheaded by Taiwanese YesHealth Group, will encompass 20 000 square metres with 19 layers and a height of 15 metres. This facility is expected to yield up to 2 200 kilograms of leafy greens daily, including various types of lettuce, cruciferous vegetables, baby leaves and specialty crops like edible flowers.
In January 2024, Fourth Milling, a renowned producer of flour, feed, bran and wheat products, chose Riyad Capital to manage its upcoming initial public offering (IPO) on Tadawul. With a daily production output of 3,150 tonnes and plans to go public, the IPO could potentially raise over USD 200 million, marking a milestone in the company’s remarkable growth since its establishment in 2017.

Also in January 2024, Saudi Arabia’s temporary halt on strawberry imports from Egypt and other nations aimed to stabilize the Kingdom’s internal market. Although not a ban, exporters must obtain a 15-day export permit.

The Ministry of Environment, Water and Agriculture is striving to recycle 95 percent of the country’s waste by 2024, expecting to boost GDP by SAR 120 billion (USD 31.99 billion) and create over 100,000 jobs. This plan includes initiatives to recycle 100 million tonnes of waste annually, preserve land, plant trees and raise environmental awareness.

Saudi Arabia’s National Biotechnology Strategy aims to become a regional leader by 2030 and a global hub by 2040, focusing on vaccines, bio-manufacturing, genomics and plant optimization. This strategy seeks to boost the domestic biotechnology industry, enhance food security and drive economic growth.

The Syrian Arab Republic

The Syria Recovery Trust Fund (SRTF) achieved a significant milestone in its agriculture project, delivering 500 metric tonnes of wheat seeds to the Implementing Entity. This initiative, titled “Support Farmers for the Production of Wheat Crop in North Aleppo,” aimed to distribute wheat seeds to 1,000 farmers, enabling the cultivation of 2,000 hectares of land. Alongside providing additional agricultural resources like fertilizers, agrochemicals and capacity-building sessions in Farmer Field Schools, this endeavour sought to revitalize wheat production, ultimately enhancing food security and livelihoods in Northern Aleppo.

Tunisia

Tunisia plans to import 385,000 tonnes of soft wheat from France in 2023/24, marking a 54 percent increase from the previous year’s 250,000 tonnes shipment. On the other hand, Tunisia imported 412,000 tonnes of wheat from Russia in the first half of the 2023/24 agricultural year (July–December), 50 percent more than the 278,000 tonnes exported during the entire 2022/23 marketing campaign.

Faced with a 5-year drought affecting productivity, Tunisia should import a total of 2.2 million tonnes of wheat in 2023/24 to meet its yearly consumption of around 3 million tonnes, according to USDA. To reduce dependency, the Ministry of Agriculture planned to expand cereal cultivation to 1.2 million hectares by 2035 against an average area of less than 900,000 hectares currently, targeting 500,000 hectares for durum wheat and 100,000 hectares for soft wheat. To support this, the country’s Cereals Office invested TND 13 million in expanding cereal storage capacity in Bizerte from 13,000 to 30,000 tonnes. This aligned with France’s strategy to export 9.5 million tonnes of soft wheat outside the EU by the end of the 2023/24 campaign, including plans to ship 4.3 million tonnes to Algeria and Morocco.
In December 2023, Tunisian farmers in the region of Nabeul turned to drones to combat the challenges posed by climate change, such as drought and erratic weather patterns. The start-up, RoboCare, uses drones equipped with multi-lens cameras and sensors to assess the hydration levels, soil quality and overall health of crops. This technology provided farmers with precise information on water requirements, allowing for efficient irrigation and reduced water consumption. By relying on these drones, farmers could save up to 30 percent of water consumption, reduce fertilizer and medicine costs by approximately 20 percent and increase crop production by 30 percent.

The National Agricultural Bank in Tunisia allocated TND 120 million to support farmers at the beginning of the upcoming agricultural season, specifically for the purchase of seeds and fertilizers. Of this funding, 60 percent was earmarked for small-scale farmers facing financial challenges. The Tunisian Solidarity Bank (BTS) also dedicated approximately TND 20 million to assist small farmers and microfinance associations.

The African Development Bank Group approved a loan of EUR 81.9 million to Tunisia for the implementation of the Treated Wastewater Quality Improvement Project for Climate Resilience Building. The project, which lasts from 2024 to 2028, aims to enhance wastewater treatment to meet reuse standards. It upgrades electromechanical and electrical equipment and introduces photovoltaic solar energy in 19 water treatment facilities across 11 governorates, benefiting more than 670,000 people.

Tunisia is launching Water 2050, a comprehensive strategic planning endeavour addressing water security concerns exacerbated by climate change. Plans include the construction of new seawater desalination plants. The new Zarat seawater desalination plant in Gabès, Tunisia, will be operational by the end of January 2024. There are plans to deploy similar projects in Sfax and Sousse.

In addition to its agricultural and environmental initiatives, Tunisia is also prioritizing the empowerment of its female entrepreneurs and bolstering its cereal sector. The remarkable rise of the agrofood industry as a preferred investment avenue for Tunisian women, with 37.1 percent of projects directed towards this sector.

The African Development Bank and the United Kingdom have announced the selection of the Inclusive and Sustainable Development of the Cereal Sector Project in Tunisia, as a standard-setting project under the Room to Run Sovereign transaction. This cereal sector project will strengthen the resilience of the Tunisian cereals sector to external shocks and climate change. The project will benefit up to 250,000 cereal farmers in the country, boosting their food security and self-sufficiency. Room to Run Sovereign, announced at COP26 in November 2021, is an innovative and highly scalable balance sheet optimization transaction that helps the African Development Bank lend more funding for critical climate change projects.

United Arab Emirates

In December 2023, at the 2023 United Nations Climate Change Conference (COP28), agriculture was a major topic of focus for the first time, with a full day dedicated to food and farming topics on 10 December. A series of transformative policies emerged, signifying a concerted global effort to combat climate change and foster sustainable agricultural practices. Banks
in the United Arab Emirates will mobilize AED 1 trillion, or approximately USD 270 billion in green finance, bolstering renewable energy and improving soil quality, among others. In addition, the introduction of the USD 10 billion SAFE Initiative, championed by leaders from Africa and the Middle East, aims to ensure food security, improve livelihoods and generate green employment opportunities by advocating for climate-smart agricultural practices and fostering public-private partnerships. The United States and United Arab Emirates announced at COP28 that funding for their joint effort to advance climate-friendly farming around the world has grown to more than USD 17 billion. The Agriculture Innovation Mission for Climate (AIM for Climate) initiative was launched at COP26 in 2021.

In parallel to COP28 events, innovative projects in the United Arab Emirates, like Tadweer and Aquagrain’s USD 2.5 million pilot endeavour, are poised to revolutionize resource management in arid regions by leveraging organic waste to reduce water and fertilizer consumption by up to 50 percent. Additionally, the ReFarm consortium plans to establish a circular GigaFarm through the integration of cutting-edge technologies and waste recycling methods to boost the country’s food security and decarbonize its food industry.

In January 2024, Dubai banned single-use plastic bags, promoting eco-friendly alternatives and recycling practices. Furthermore, the partnership between the recycled plastic trading platform Rebound, and the Circular Packaging Association aims to advance standardization efforts for plastic recyclates. This collaboration focuses on promoting high-quality recycled plastics and sustainable packaging solutions.

As part of United Arab Emirates’ international cooperation in agriculture, a local company invested USD 30 million in a berry farming project in Uzbekistan focusing on innovative farming techniques and sustainable agricultural practices. In addition, Abu Dhabi’s Unifrutti Group acquired the Chile-based fruit supplier Verfrut. Verfrut produces grapes, cherries, apples and blueberries and operates more than 14 000 hectares of land across Latin America, South Africa, Europe and the Asia Pacific, employing around 11 000 staff. Furthermore, the collaboration between Bayer and agritech company Silal aims to enhance sustainable agriculture in the United Arab Emirates. Through trials on various vegetable seeds and capacity-building programmes, this partnership seeks to address climate change challenges in agricultural practices.

Abu Dhabi Agriculture and Food Safety Authority (ADAFSA) plans to expand the use of recycled water in agriculture in Abu Dhabi aiming to reduce pressure on groundwater resources and promote the sustainable development of the agricultural sector.
SECTION III: GENDER EQUALITY AND WOMEN'S EMPOWERMENT FOR INCLUSIVE FOOD SYSTEMS TRANSFORMATION

Introduction

Despite the progress achieved in the past decades, the NENA region still shows some of the widest gender gaps in the world, particularly in relation to political representation and economic participation. Despite the progress achieved by many countries, profound gender inequalities persist in the access to assets, inputs, resources and technologies, as well as with regard to women's participation and leadership in some of the relevant decision-making processes.

These inequalities are obstacles to building greener, inclusive and resilient food systems that deliver food security and nutrition to all. Closing gender gaps in agrifood systems enhances the well-being of women, households and communities by reducing poverty and food insecurity, boosting economic growth and strengthening resilience.

Women's role in agrifood systems in the region

Women play multiple and critical roles in agrifood systems as food producers, agricultural entrepreneurs and decision-makers responsible for the food and nutritional security of their households and communities. In the NENA region, 27 percent of working women are employed in agrifood systems, including 21 percent of all female workers in agriculture and 6 percent in off-farm activities, compared to the global average of 36 percent of working women.

4 The information contained in Section III is based on a forthcoming FAO publication titled “The shifting dynamics: women in agrifood systems – a decade of change in the Near East and North Africa (NENA) region.”
women in agrifood systems. However, there has been an overall decrease in the share of women’s contribution in agriculture since 2011, except in some countries such as Egypt, Morocco, Palestine, the Sudan and Yemen, where the agriculture sector provides a higher share of female than male employment as a result of men and youth leaving the sector to pursue other employment opportunities, or due to conflicts.

Across the region, women workers and women-led cooperatives, associations, small and medium enterprises (SMEs) are increasingly active in the upstream and midstream of many agrifood value chains such as dairy, fruits, etc. Rural women also play a vital, yet unrecognized role in the use and management of natural resources such as land, water, drylands and forests, especially when related to small-scale agriculture and family farming.

As primarily responsible for ‘reproductive work’ (i.e. child care, food preparation and cleaning, etc.), women also provide an essential contribution to the food security and nutrition of households and communities, particularly in rural areas where social services are often unavailable. Rural women perform crucial but overlooked agricultural tasks like backyard poultry farming, kitchen gardens and home-based dairy processing– tasks that are vital for their household’s nutrition and well-being.

Women’s crucial role in ‘reproductive work’ becomes even more critical in times of crises, because it compensates for the interruption or the reduction of public services, as clearly documented by the impact assessments of the COVID-19 pandemic and in contexts affected by protracted conflicts and natural disasters. Women’s excessive work burden directly impacts their ability to engage in paid work, education and public life. Women and girls living in remote rural areas or conflict-affected areas, where services and infrastructure are lacking or disrupted, face a greater risk of time poverty. Women in conflict-affected areas and in emergency situations, refugees and internally displaced are particularly vulnerable to the risk of violence, which further undermines their resilience capacity. Rural women often suffer from a double layer of marginalization, as health and protection services are often lacking in rural areas.

Gender disparities within agrifood systems have a substantial impact on exacerbating food insecurity and malnutrition, disproportionately affecting women compared to men. The prevalence of food insecurity was higher among women than among men, both globally and in the NENA region. Worldwide, the prevalence of moderate or severe food insecurity increased from 1.7 percentage points in 2019 to 4.3 percentage points in 2021. Moderate or severe food insecurity among women has increased in all NENA countries from 2015 to 2022, except for Algeria and Egypt, where it has decreased by 6 and 2 percentage points, respectively. Yemen reports the highest share of people experiencing moderate or severe food insecurity, particularly among women. In 2021, 71.7 percent of women reported experiencing moderate or severe food insecurity, compared to 62.7 percent of men.
Persisting gender gaps in the agrifood systems in the NENA region

Women’s land ownership is below 5 percent in Egypt and in Jordan; approximately 78 million people live in fear of losing their home or land in the next 5 years in the whole region. The lack of secure land tenure rights limits women’s access to other productive resources (including water) and services (such as extension services, credit and other financial services for which land is often required as collateral). It also limits their membership to rural and producer organizations, which are instrumental in accessing rural advisory services and market opportunities.

Gender gaps in access to assets, resources and advisory services limit women’s exposure and uptake of green, water-saving and climate-smart practices and technologies. This does not only undermine their adaptive capacities and resilience to climate change or climate-induced disasters; it also hinders national and regional efforts for greening agriculture and reducing environmental degradation. Women’s participation and leadership in climate action remain limited and gender concerns are only partially addressed in national adaptation plans (NAPs) and climate-related strategies. Nevertheless, women are more likely to experience displacement and fatalities compared to men due to gender roles at the household and community levels.

Digitalization holds the potential to facilitate women’s access to information, services and market opportunities. The COVID-19 pandemic has accelerated the use of digital solutions in the agrifood sector, creating new opportunities for the economic inclusion of small-scale value chain actors. However, digital inclusion remains a challenge in the NENA region, where, despite recent achievements, persistent digital gender parity issues continue to exist, as men have a 15 percent higher level of internet access than women in the NENA region as of 2019. Many factors contribute to maintaining this digital gender gap, including unequal access to quality education, digital literacy programmes and financial resources for rural women and girls. In some areas, rigid gender norms and persisting legal barriers limit women’s access to technology and innovation.

The insufficient responsiveness of policies and institutions operating in agrifood systems also limits women’s access to agricultural support services. Membership policies of producer organizations are not always inclusive, and service providers often fail to respond to women’s specific needs and demands. This leads to substantial gaps in access to information, skills, technologies and practices that explain why women remain concentrated in the informal sector, and the low-skilled and less lucrative nodes of agrifood value chains.

While progress was achieved in promoting women’s representation in political institutions, equal participation and leadership are far from achieved in the NENA region. The region exhibits low performance regarding women’s political empowerment. Women’s limited participation and leadership in relevant decision-making processes prevent them from shaping policies, investments and strategies that are responsive to their needs and interests. This is evident in rural institutions, organizations and governance mechanisms, where women are often unequally represented.
FAO's work on gender equality in the region

FAO’s key areas of work on gender equality and women’s empowerment in the NENA region focus on:

1. strengthening women’s role in agrifood systems through improved access to and control over assets, resources, skills development opportunities and services;

2. promoting equitable access to climate-smart, water-saving and environmentally friendly practices, technologies and services;

3. enhancing women’s equitable participation and decision-making in relevant rural organizations, institutions and governance mechanisms; and

4. restoring women’s livelihoods and improving their resilience capacities to cope with the impact of multiple shocks and crises, including conflicts and natural disasters.

FAO invests in the generation and dissemination of data and knowledge on the gender gaps that affect the agrifood systems in the region and the promising solutions to overcome them. In close collaboration with national institutions, comprehensive Country Gender Assessments of the Agriculture and Rural Sectors were undertaken for Egypt, Lebanon, Mauritania, Morocco, Palestine, the Sudan and Tunisia to provide a solid evidence base for gender-responsive policy and programme development in these critical sectors. In addition, several thematic studies contributed to generating knowledge on gender equality in specific areas of FAO’s work in the region.

FAO also provides technical support to countries in reporting on Sustainable Development Goal (SDG) indicator 5.a.2, which assesses the extent to which national laws protect women’s rights to land.

Moreover, FAO has continued to develop guidance materials and tools that support gender-responsive actions and interventions by a wide range of stakeholders operating in agrifood systems. FAO’s learning package on gender-sensitive value chain development was made available in Arabic to facilitate its uptake by local partners and new tools have been developed to support gender-responsive business models and service provision in agrifood value chains.

While gender equality concerns are mainstreamed across all its regional interventions, FAO has initiated and implemented an increasing number of women-targeted and gender-focused interventions that led to significant results in terms of rural women’s increased access to resources and income-generating activities (such as in the case of Egypt, Iraq, Jordan, Tunisia and Yemen) and improved performance of women’s cooperatives and associations in the agrifood sector (for example, in Lebanon, Oman, Palestine and Saudi Arabia).

Women’s equitable adoption of climate-smart, water-saving, and environmentally friendly technologies and practices is the entry point for several interventions developed with the clear purpose of empowering women as agents of change for climate adaptation and sustainable water management (for example, in the case of Egypt and Iraq). FAO’s programmes in crisis-affected countries pay specific attention to reinforcing women’s and girls’ resilience capacities...
by addressing gender-differentiated vulnerabilities while also supporting the transformation of unequal gender roles (for example, facilitating women’s participation in the labour force), such as in the case of programmes in Palestine, the Sudan and Yemen.

Group-based and participatory approaches, such as FAO Farmer’s Field Schools, Farm Business Schools and Cooperative Business Schools, have proved successful in many countries in enhancing the outreach to rural women and facilitating their access to information, knowledge and good agricultural practices, as well as business skills. Furthermore, these approaches showed promising results in building women’s agency and self-confidence, challenging harmful gender stereotypes and in promoting more equitable gender dynamics, both at the household and community level.

FAO has accelerated its efforts to adopt Gender-Transformative Approaches (i.e. approaches that explicitly aim to challenge discriminatory social norms, attitudes and behaviours that are the root causes of gender inequalities) across its project portfolio such as the Dimitra Clubs (introduced in Mauritania and the Syrian Arab Republic) or the Economic and Social Empowerment curriculum (also piloted in the Syrian Arab Republic).

FAO has enhanced its efforts to raise awareness and build capacities of different stakeholders, both at the national and regional levels. In Morocco, for example, FAO supports the Ministry of Agriculture to establish an information system for coordinated planning, monitoring and reporting on the gender-related results of the Green Generation Strategy.

In addition, FAO has developed an updated version from the Regional Gender Strategy and Action Plan to sharpen the focus of its programme of work on gender equality and women’s empowerment in NENA. The Strategy also aims to facilitate the reporting of the progress achieved to Member Countries.
ANNEX

Figure A1. Crude oil (USD/barrel) and natural gas index (2010=100) of the World Bank


Figure A2. Prices of fertilizers: Diammonium phosphate (DAP), urea and potassium chloride (USD/tonnes)
