ADDRESSING FOOD SECURITY CHALLENGES FACED BY NEAR EAST AND NORTH AFRICA REGION DUE TO THE UKRAINE CRISIS

COUNTRY INFORMATION NOTES
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Food and Agriculture Organization of the United Nations
Cairo, 2022
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The following link provides all of the information and analysis, by the FAO, on the Ukraine crisis.


The following link contains seven policy proposals, by the FAO, in this regard.

## Abbreviations and Acronyms

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<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>FAPDA</td>
<td>Food And Agriculture Policy Decision Analysis Tool</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
</tr>
<tr>
<td>TDM</td>
<td>Trade Data Monitor</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
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<td>WFP</td>
<td>World Food Programme</td>
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INFORMATION NOTE:
FOOD SECURITY CHALLENGES IN EGYPT

Source: ©FAO/Heba Khamis
1.1. Trade import dependency

**Foodstuffs:** The Russian Federation and Ukraine are key suppliers of foodstuffs to Egypt. As shown in the Figure 1 illustrated below, Egypt highly depends on the Russian Federation and Ukraine for wheat imports (58 percent and 18 percent respectively as an average between 2016 and 2020).\(^1\) Indeed, wheat plays a key role for food consumption in the country, representing between 35 percent and 39 percent of caloric intake per person in the last few years. About 62 percent of total wheat use in the country is usually imported;\(^2\) with the Russian Federation and Ukraine supplying approximately 8.9 million tonnes of wheat. Imports of maize and soybeans partly depend on Ukraine supply by 26 percent and 14 percent respectively. Although Egypt also presents high import dependency on the two countries for barley, the absolute volume of import is minimal (around 29 thousand tonnes) (Figure 2).

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**Figure 1:** Import dependency of selected crops (2016–2020 average)

![Import dependency chart](image)

**Source:** Calculated using data from FAOSTAT, 2022.

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» **Fertilizers:** According to the TDM data available for 2021, Egypt is not among countries significantly importing fertilizers from the Russian federation and Belarus. The average import dependency between 2018 and 2020 for nitrogen and potassium fertilizers from the Russian Federation and Belarus is 3.2 percent and 2.1 percent respectively.³

1.2. Price increase

» According to IFPRI, “even just before the outbreak of the Russia-Ukraine war, prices of commodities in Egypt were increasing, with overall annual inflation and food inflation reaching 7.3 percent and 8.4 percent, respectively in January. The war has started adding further pressure to food prices in Egypt, and consumers are meanwhile feeling these impacts, with annual inflation jumping to 31-month high in February (8.8 percent), primarily driven by a surge in food prices (17.6 percent)”.

» Since 2020, domestic wheat price has been increasing (Figure 4) even prior to the conflict. In January 2020, the national retail average price was USD 420 per tonne while according to the latest data in December 2021, it increased to USD 550 per tonne (a 31 percent increase in two years).

Figure 4: Egypt wheat flour retail price (national average, USD/tonne)


1.3. Food reserve

» Egypt has steady domestic food quantity for selected crops (Figure 5) with stable food stocks (Figure 6). In 2019, domestic wheat quantity and opening stocks of wheat were approximately 17 million tonnes and 4 million tonnes respectively.

Minister of Finance Mohamed Maait stated that Egypt will have stock of wheat sufficient for eight months to cover its domestic consumptions including the local harvest and the government will import from alternative countries to respond to the emergency (8 March 2022).5

5 https://english.ahram.org.eg/News/462435.aspx
1.4. Food insecurity and undernourishment

» **Food insecurity:** Figure 7 indicates an estimated 27.9 million people in Egypt experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 2.2 million, or 8.6 percent compared with 2015 (3-year average of 2014–2016).6

» **Undernourishment:** The number of undernourished in Egypt reached 5.4 million people in 2019, an increase of 1.3 million, or 31.7 percent compared with 2015.

**Figure 7:** Number of moderately or severely food insecure people and undernourished people (3-year average)

![Graph showing number of moderately or severely food insecure people and undernourished people](image)

**Source:** Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

1.5. Food waste

» Food waste in Egypt is estimated at approximately 20 percent of the total wheat supply from domestic production and imports in 2017/2018 season, accounting for 4.4 million tonnes.7

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1.6. Government’s response to current challenges

» **Modification of food stock:** The Cabinet meeting has decided to increase Egypt’s reserves of wheat that are sufficient for more than four months. The local wheat supply season will start in mid-April and the strategic reserve will increase to last until next November. The government has announced a new and relatively higher buying price for domestic wheat from farmers (24 February 2022).8

» **Export ban:** Egypt has banned the export of wheat, flour, oils, corn, lentils, pasta, beans, gravel and mashedush amid growing concerns over food reserves (12 March 2022).9

» **Price control:** Egypt has set a fixed price for unsubsidized bread in an effort to counter rising food prices after Russia’s invasion of Ukraine closed off access to lower-priced Black Sea wheat. The Prime Minister set the price of commercially sold bread at 11.50 Egyptian pounds (USD 0.66) per kg. The price of unsubsidized bread has jumped by as much as 25 percent, from 1.00 to 1.25 Egyptian pounds a loaf in bakeries. Flour prices have risen by up to 15 percent, according to the Cairo Chamber of Commerce.10 This measure has been implemented in response to the crisis. (21 March 2022)

» **Macroeconomic policy:** Egypt has asked for support from the IMF as the country struggles to weather the economic impact of Russia’s invasion on Ukraine. Cairo is facing mounting pressures on its public finances since the current conflict has sent grain prices soaring and increased the price of oil. Egypt is the world’s biggest wheat importer, is heavily reliant on supplies from The Russian Federation and Ukraine and has a subsidized bread programme, which feeds 70 million people (23 March 2022).11

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8 [https://english.ahram.org.eg/News/461661.aspx](https://english.ahram.org.eg/News/461661.aspx)
11 [https://www.ft.com/content/8d91db0f-8b8d-4184-b81f-0adca85ca692](https://www.ft.com/content/8d91db0f-8b8d-4184-b81f-0adca85ca692)
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN LEBANON
2.1. Trade import dependency

» **Foodstuffs:** The Russian Federation and Ukraine are key suppliers of foodstuffs to Lebanon. As illustrated in the Figure 8 below, Lebanon highly depends on the Russian Federation and Ukraine for wheat imports (31 percent and 55 percent respectively of total imports on average between 2016 and 2020). The two countries supply approximately 527 thousand tonnes of wheat to Lebanon. Imports of maize partly depend on the two countries’ supply by 35 percent whereas it’s 80 percent for maize. The average import quantities of maize and barley are respectively 204 thousand and 91 thousand tonnes. Although rapeseed appears to be highly dependent on import from the two countries, the absolute volume of import is minimal (around 60 tonnes).

**Figure 8:** Import dependency of selected crops (2016–2020 average)

![Figure 8: Import dependency of selected crops (2016–2020 average)](image)

**Source:** Calculated using data from FAOSTAT, 2022.

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» **Fertilizers:** According to the TDM data available for 2021, Lebanon is not among countries significantly importing fertilizers from the Russian federation and Belarus. The average import dependency from the Russian Federation and Belarus between 2018 and 2020 for nitrogen fertilizers is 14.0 percent.13

### 2.2. Price increase

Lebanon has suffered from economic collapse in the last two years and panic has set in among a population worn down by shortages of commodities. In 2020, main silos for grains were destroyed by an explosion at a Beirut port and recently the country is facing drastic inflation.14 Since 2020, domestic wheat flour price in Lebanon has been soaring (Figure 9) even prior to the conflict. In January 2020, the national retail average price was USD 1,120 per tonne while the latest data in December 2021, it increased to USD 8,900 per tonne (nearly eight times as high as in 2020).

![Figure 9: Lebanon wheat flour retail price (national average, USD/tonne)](source)


### 2.3. Food reserve

The following figures (Figure 10 and 11) show domestic food quantity and food stocks for selected crops in Lebanon between 2010 and 2019.15 It is noteworthy that Lebanon currently has tight wheat stocks despite it being a staple food.

Due to extremely low level of food reserve, officials expect wheat stocks to run out in a month.16

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15 Latest data is not available.

16 [https://www.arabnews.com/node/2040301/middle-east](https://www.arabnews.com/node/2040301/middle-east)
**Figure 10:** Domestic supply quantity in Lebanon (thousand tonnes)

![Graph showing domestic supply quantity in Lebanon (thousand tonnes)](image)


**Figure 11:** Opening stock (thousand tonnes)

![Graph showing opening stock (thousand tonnes)](image)

2.4. Food insecurity

» Undernourishment: The number of undernourished in Lebanon reached 0.6 million people in 2019, an increase of 0.2 million, or 50 percent compared with 2015. In relation to the increase in the number of undernourished people, prevalence of undernourishment rose from 5.9 percent to 9.3 percent in the same period (Figure 12).

![Figure 12: Number and prevalence of undernourished people](image)

**Source:** Based on FAOSTAT, 2022. [https://www.fao.org/faostat/en/#data](https://www.fao.org/faostat/en/#data). *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.*

2.5. Food waste

» According to the report from United Nations Environment Programme (UNEP), total household food waste in Lebanon is estimated at approximately 720 thousand tonnes per year.¹⁷

2.6. Government’s response to current challenges

» **Export ban:** Lebanese government has banned export of processed fruits and vegetables, milled grain products, sugar and bread in effect on 18 March 2022.\(^{18}\)

» **Modification of import partners:** Lebanese Minister of Economy and Trade Amin Salam noted that Lebanon imported around 60 percent of its wheat from Ukraine and the Russian Federation, and said the government had opened talks with France, India, and the US with the aim of sourcing wheat from them instead, but at a higher cost. (21 March 2022).\(^{19}\)

» **Food support:** “Lebanese President Michel Aoun said on 21 March 2022 that the Russia-Ukraine conflict affected Lebanon’s capacity to secure sufficient wheat, urging UN to increase food support for his country, a statement by Lebanon’s Presidency reported.” (22 March 2022).\(^{20}\)

» **Food reserve:** “Lebanon’s economy Minister told Reuters [this week] Lebanon is planning a tender to import 50,000 tonnes of wheat from India but the timing depends on the central bank opening the necessary credit line.” (25 March 2022).\(^{21}\)

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\(^{18}\) https://public.tableau.com/app/profile/laborde6680/viz/ExportRestrictionsTracker/FoodExportRestrictionsTracker

\(^{19}\) https://www.arabnews.com/node/2040301/middle-east


\(^{21}\) https://english.alarabiya.net/News/middle-east/2022/03/25/Lebanon-s-president-says-Iran-ready-to-supply-wheat-to-Lebanon?msclkid=cf6ad705b07e11ec9e25abdf3523ea6f
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN LIBYA

Source: © FAO/Sia Kambou
3.1. Trade import dependency

- **Foodstuffs**: Wheat is a staple food in Libya. Ukraine is the biggest supplier of cereals for Libya (Figure 13). As Figure 14 and 15 illustrated below, 30–40 percent of total wheat imports came from Ukraine during the 2017–2021 period. Including the Russian Federation, the two countries supply approximately 700 thousand tonnes on average. In 2020/21 season, 45 percent of the overall wheat imports were covered by Ukraine. Imports of barley and maize also highly depend on Ukraine’s supply by 26 percent and 14 percent respectively. Although Libya illustrates high import dependency on the two countries for barley, the absolute volume of import is minimal (around 27 thousand tonnes). Libya entirely relies on Ukraine for soybean import, however the absolute quantity represents only 5.2 thousand tonnes.

- Figure 16 shows that Libya also had high reliance on Ukraine for sunflower oil import (25 percent).

- According to International Grain Council (IGC), in 2021/22 season, Libya is expected to import about 1.32 million tonnes of wheat, whilst the consumption will be 1.28 million tonnes.

**Figure 13**: Share of cereals imports to Libya (2017–2021 average)

Figure 14: Share of wheat flour import to Libya (2017–2021 average)


Figure 15: Import dependency of selected crops (2016–2020 average)

Source: Calculated using data from FAOSTAT, 2022.
3.2. Price increase

» Libya had seen price rise at retail level. Figure 17 and 18 show the wheat flour retail price and vegetable oil retail price in Libya between October 2017 and December 2021 (FAO). Since 2017, prices for these two commodities have been increasing and it was highly anticipated that further food prices spike may have hit the country in early 2022 in relation to the world price rise from February 2022.


» Fertilizers: According to the TDM data available for 2021, Libya is not among the countries significantly importing fertilizers from the Russian federation.
3.3. Food reserve

Libya has slightly a decreasing trend for domestic supply of food (Figure 19). In contrast, food stocks have shown an increase for wheat and barley since 2018 (Figure 20). In 2019, domestic supply of wheat was approximately 1.4 million tonnes whereas the opening stocks of wheat was at 0.4 million tonnes.
Figure 19: Domestic supply quantity in Libya (thousand tonnes)

Figure 20: Opening stocks (thousand tonnes)


The Government of National Unity Minister of Economy and Trade Mohammed Al-Haweij said wheat reserves in Libya are sufficient for more than 12 months since the existing stock is more than 0.4 million tonnes and contracts will be implemented by approximately 0.5 million tonnes. (27 February 2022).

3.4. Food insecurity

» **Food insecurity:** Figure 21 indicates an estimated 2.5 million people in Libya experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 0.6 million, or 8.3 percent compared to 2015 (3-year average of 2014–2016).²⁴

![Figure 21: Number and prevalence of moderately or severely food insecure people](source)

*The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.*

3.5. Food waste

» Total food waste in Libya is estimated at 513,146 tonnes annually. Reduction of food waste can potentially alleviate the country’s food shortage challenge.²⁵

3.6. Government’s response to current challenges

» **Trade:** The Prime Minister-designate, Fathi Bashagha, said Libya is committed to supporting and stabilizing energy sources, and security in the Mediterranean (03 March 2022).²⁶

» **Export ban:** Libya imposed a total ban on March 22, on the export of all types of fish effective immediately. It also announced the plan to create a three-month strategic stock of basic foods (22 March 2022).²⁷


²⁷ https://www.ice.it/it/news/notizie-dal-mondo/207629
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN MAURITANIA

Source: ©FAO/We Balderi
4.1. Trade import dependency

» **Foodstuffs**: The Russian Federation and Ukraine are key suppliers of foodstuffs to Mauritania as the country imports from the two countries 28.4 percent of total cereal import (Figure 22). In contrast, imports of cereal flours have lower dependence on those two countries, as shown in Figure 23.

» 31 percent of total wheat import and 37 percent of total maize import between 2016 and 2020 came from the Russian Federation and Ukraine (Figure 24). Average annual supply from these two countries accounts for 278 thousand tonnes for wheat and 8 thousand tonnes for maize. According to FAO, more than 50 percent of wheat import in 2021 came from the two countries, indicating that import dependency has generally increased in the past years.

» 21 percent of sunflower seeds oil were sourced from Ukraine (Figure 25).

**Figure 22**: Share of cereal imports to Mauritania (2017–2021 average)


**Figure 23:** Share of cereal flours imports to Mauritania (2017–2021 average)

<table>
<thead>
<tr>
<th>Country</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>21.6%</td>
</tr>
<tr>
<td>France</td>
<td>38.5%</td>
</tr>
<tr>
<td>Spain</td>
<td>35.5%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>4.3%</td>
</tr>
</tbody>
</table>


**Figure 24:** Import dependency of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Russia Federation</th>
<th>Ukraine</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>13%</td>
<td>18%</td>
<td>69%</td>
</tr>
<tr>
<td>Maize</td>
<td>12%</td>
<td>25%</td>
<td>63%</td>
</tr>
</tbody>
</table>

» **Fertilizers**: Between 2018 and 2020, Mauritania imported on average 25.6 percent of its nitrogen fertilizers from the Russian Federation and Belarus.²⁹

### 4.2. Price increase

» Since early 2021, domestic wheat price has been increasing (Figure 26) prior to the Ukraine conflict. In January 2021, the national retail average price was USD 470 per tonne while the latest data in January 2022 shows it increased to USD 690 per tonne (a 47 percent increase in a year).
4.3. Food reserve

Mauritania has an increasing trend for both domestic supply and food reserves for wheat (Figures 27 and 28). In 2019, domestic wheat quantity and opening stocks of wheat were approximately 560 thousand tonnes and 459 thousand tonnes respectively implying that the country had a sufficient food reserve for around 10 months.

**Figure 27:** Domestic supply quantity in Mauritania (thousand tonnes)

![Graph showing domestic supply quantity in Mauritania](source)


**Figure 28:** Opening stocks (thousand tonnes)

![Graph showing opening stocks in Mauritania](source)


*The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.*
4.4. Food insecurity and undernourishment

» **Food insecurity**: Figure 29 indicates an estimated 1.8 million people in Mauritania experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 0.7 million, or 63 percent compared with 2015 (3-year average of 2014–2016).\(^{30}\)

» **Undernourishment**: The number of undernourished in Mauritania reached 0.4 million people in 2019, an increase of 0.1 million, 33 percent compared with 2015. The prevalence of undernourishment has risen from 8.3 percent in 2015 to 9.1 percent in 2019.

![Figure 29: Number of moderately or severely food insecure people and undernourished people](source)

*Source:* Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.*

4.5. Food waste

» Total household food waste in Mauritania is estimated at 450,720 tonnes per year. Reduction of food waste can potentially alleviate the country’s food shortage challenge.\(^{31}\)

4.6. Government’s response to current challenges

» Thus far, there has not been any specific governmental action taken in terms of export ban, macro-economic policy, food stock or trades.


INFORMATION NOTE: FOOD SECURITY CHALLENGES IN OMAN
5.1. Trade import dependency

- **Foodstuffs:** The Russian Federation and Ukraine are key suppliers of foodstuffs to Oman since the country imports on average 34 percent, 16 percent and 18 percent of total wheat, maize and barley respectively from these two countries between 2016 and 2020 (Figure 30), representing an annual supply of 350 thousand tonnes of wheat, 72 thousand tonnes of maize, and 26 thousand tonnes of barley. According to FAO, in 2021, approximately 50 percent of wheat import came from these two countries, indicating that import dependency has generally increased in the past years.

![Figure 30: Import dependency of selected crops (2016–2020 average)](source)


- **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, Oman imported on average 5.7 percent and 69.3 percent of nitrogen and potassium fertilizers respectively from the Russian Federation and Belarus. The potential shortage and high price of fertilizers could significantly decrease fertilizer use and cause lower productivity in the following years.

![Figure 31: Consumer prices, Food indices, 2015-2021 (2015=100)](source)


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5.2. Price increase

Food price at household level has shown an increase. Most recently, since early 2021, food indices of consumer prices have been increasing drastically in Oman (Figure 31) even before the conflict. According to FAOSTAT, in late 2021, food prices are at the highest in the past 7 years.

![Figure 31: Consumer prices, Food indices, 2015–2021 (2015=100)](https://www.fao.org/faostat/en/#data)

5.3. Food reserve

Oman gradually increased domestic food quantity for wheat, maize and barley between 2010 and 2019 (Figure 32) while the reserves decreased for wheat and remained at low level for maize and barley (Figure 33). According to the data, domestic wheat quantity and opening stocks of wheat were approximately 374 thousand tonnes and 79 thousand tonnes respectively implying that in 2019, the country had a sufficient food reserve for around 2 months.
**Figure 32:** Domestic supply quantity (thousand tonnes)


**Figure 33:** Opening stocks (thousand tonnes)

Mr. Qais bin Mohammed al Yousuf, Minister of Commerce, Industry and Investment Promotion, currently stated that the government is closely monitoring the prices of foodstuff and essential commodities in the markets. The Minister also addressed that no fears of an impending shortage of wheat in the country are to be concerned, regarding the substantial stocks of the essential grain.33

5.4. Food insecurity

- **Undernourishment**: The number of undernourished in Oman reached 0.4 million people in 2019, an increase of 0.1 million, 33 percent compared with 2015. The prevalence of undernourishment has risen from 8.1 percent in 2015 to 8.2 percent in 2019 (Figure 34).

![Figure 34: Number and prevalence of undernourished people](https://www.fao.org/faostat/en/#data)

Source: Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

5.5. Food waste

- Total household food waste in Oman is estimated at 470,332 tonnes per year. Reduction of food waste can potentially alleviate the country’s challenge of food shortage.34

5.6. Government’s response to current challenges

- Until March 2022, there has not been any specific governmental action taken in terms of export ban, macro-economic policy, food stock or trades.

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INFORMATION NOTE: FOOD SECURITY CHALLENGES IN YEMEN

Source: ©FAO/Essam Alkamally
6.1. Trade import dependency

» **Foodstuffs:** Yemen imports 97 percent of its wheat. A large portion of the Yemeni population’s caloric intake consists of wheat products, and the country relies heavily on imports from the Russian Federation and Ukraine that supplied on average 45 percent of total wheat import quantity between 2016 and 2020 (Figure 35). The average annual supply of wheat from the two countries accounts for 1.2 million tonnes. This import dependency rate on the two countries remained the same in 2021, therefore the ongoing crisis could significantly impact Yemen’s food security.

![Figure 35: Import dependency of selected crops (2016–2020 average)](source: FAOSTAT)

**Source:** Calculated using data from FAOSTAT, 2022.

» **Fertilizers:** According to the TDM data available for 2021, Yemen is not among the countries significantly importing fertilizers from the Russian federation.

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35 https://www.ifpri.org/blog/russian-invasion-ukraine-threatens-further-exacerbate-food-insecurity-emergency-yemen
6.2. Price increase

» The interruption of food import flow is pushing up global prices of grain. Since Yemen highly depends on import to compensate their domestic consumption demands, rising prices could expose people to food insecurity risks. Figure 36 shows that retail price of wheat flour has more than double in many areas in the past year. Due to the concern of food insecurity, the demand for wheat has been augmenting and the prices are anticipated to further increase.37

![Figure 36: Wheat flour retail price (Yemeni Rial/kg, average of main markets, Mar 2015–Mar 2022)](source)


6.3. Food reserve

» Yemen gradually increased domestic supply of wheat between 2010 and 2019 (Figure 37) whereas the wheat reserve shows a slightly decreasing trend (Figure 38). According to the data, domestic wheat quantity and opening stocks of wheat were approximately 3.5 million tonnes and 0.3 million tonnes respectively in 2019.

» On 2 March 2022, Yemen’s Prime Minister Maeen Abdulmalik addressed that the government had enough wheat and other basic goods reserves to cover four months.38

37 https://www.thenationalnews.com/mena/2022/03/03/yemenis-panic-buying-wheat-as-prices-soar-amid-russia-ukraine-crisis/?msclkid=7be51cefb33311ecab4c15f8b8a2ee
38 https://www.thenationalnews.com/mena/2022/03/03/yemenis-panic-buying-wheat-as-prices-soar-amid-russia-ukraine-crisis/?msclkid=7be51cefb33311ecab4c15f8b8a2ee
6.4. Food insecurity

» **Undernourishment**: Yemen is one of the most vulnerable countries to the increasing price for staple food, leading to high risk of food insecurity. The number of undernourished in Yemen reached 13.2 million people in 2019, an increase of 1.7 million, or 15 percent compared with 2015. The prevalence of undernourishment has risen from 43.4 percent in 2015 to 45.4 percent in 2019 (Figure 39).
6.5. Food waste

» Total household food waste in Yemen is estimated at around 3 million tonnes per year. Reduction of food waste can potentially alleviate the country’s food shortage challenge.39

6.6. Government’s response to current challenges

» “Yemeni Prime Minister Maeen Abdulmalik stressed that the priority of his government during the coming period will be to consolidate stability and political consensus, warning that any political turmoil will greatly affect efforts to enhance security, stability, and recovery” (9 March 2022).40

» There hasn’t been any specific governmental action taken in terms of export ban, macro-economic policy, food stock or trades.
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN TUNISIA
7.1. Trade import dependency

» Foodstuffs: Tunisia imports large quantity of grains (Figure 40) and the imports account for approximately 70% of its cereals needs. Ukraine is supplying 39 percent of the total volume of imported cereals (Figure 41). In the case of soft cereal imports, the Russian Federation contributed by around 6 percent (Figure 42).

» Tunisia heavily relies on imports from Ukraine that supplied on average 39 percent, 57 percent and 17 percent respectively of total wheat, maize and barley import quantity between 2016 and 2020 (Figure 43).

Sunflower seeds oil had been sourced largely from the two countries; 63 percent from Ukraine and 28 percent from the Russian Federation (Figure 44).

Figure 40: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>2 221 143</td>
</tr>
<tr>
<td>Maize</td>
<td>1 125 192</td>
</tr>
<tr>
<td>Barley</td>
<td>949 755</td>
</tr>
<tr>
<td>Soybeans</td>
<td>722 317</td>
</tr>
<tr>
<td>Sunflower seed</td>
<td>5 174</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>130</td>
</tr>
</tbody>
</table>


Figure 41: Share of cereal imports to Tunisia (average of value trade 2017–2021)


Figure 42: Share of soft cereal imports to Tunisia (average of quantity trade 2017–2021)

**Figure 43:** Import dependency of selected crops (2016–2020 average)

![Import dependency of selected crops](image)

**Source:** Calculated using data from FAOSTAT, 2022.

**Figure 44:** Share of sunflower seeds oil imports to Tunisia (average of quantity 2017–2021)

![Share of sunflower seeds oil imports to Tunisia](image)

**Source:** Based on UN COMTRADE database, 2022. [https://comtrade.un.org/data/](https://comtrade.un.org/data/)
» **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, Tunisia imported on average 7.8 percent and 13.4 percent of nitrogen and potassium fertilizers respectively from the Russian Federation and Belarus.\(^4^2\) The potential shortage and high price of fertilizers could decrease fertilizer use and cause lower productivity in the following years.

### 7.2. Price increase

» Food price at household level in Tunisia has shown a significant increase since 2015 (Figure 45). Food prices are at the highest since the past 7 years and the indices indicate an increase by 38 percent in the period 2015–2021.

» Tunisia is already vulnerable against a price increase. According to New York Times, “Tunisia was already struggling to pay for grain shipments before the conflict broke out. The war seemed likely to complicate the cash-strapped government’s efforts to avert a looming economic collapse”.\(^4^3\)

**Figure 45:** Consumer prices, Food indices, 2015–2021 (2015=100)


### 7.3. Food reserve

» Tunisia had steady domestic supply quantity of selected crops and wheat-related products had the largest volume (around 2,860 thousand tonnes in 2019). The food stock in 2019 shows that food stocks were sufficient for less than two months, except for wheat whose stock was equivalent to nearly one year of domestic supply (Figure 46 and 47).


There has been a serious concern on the capacity to maintain sufficient food reserves in the country. The Tunisian government has been unable to pay for wheat shipments in the recent months resulting in shipments to wait for weeks beside the Tunisian coasts. Concurrently, shortages of products such as flour and semolina have been recorded.44

Figure 46: Domestic supply quantity (thousand tonnes)


Figure 47: Opening stocks (thousand tonnes)


7.4. Food insecurity and undernourishment

- **Food insecurity**: Figure 48 indicates an estimated 2.9 million people in Tunisia experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 0.9 million, or 45 percent compared with 2015 (3-year average of 2014–2016).\(^{45}\)

- **Undernourishment**: The number of undernourished in Tunisia remained the same at 0.3 million people during the period 2015–2019.

![Figure 48: Number of moderately or severely food insecure people and undernourished people](https://www.fao.org/faostat/en/#data)

7.5. Food waste

- According to statistics from the National Consumption Institute of Tunisia (INC), Tunisian households waste amount in total USD 197 million worth of food on an annual basis. Bread is at the top of the list of wasted foods (15.7%), followed by pasta (10%) and fruits and vegetables (6%).\(^{46}\) Reduction of food waste can potentially alleviate the country’s food shortage challenge.

7.6. Government’s response to current challenges

- **Price control**: The government currently denied their possible intervention in the food subsidies system to stabilize the price. (10 March 2022).\(^{47}\)

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INFORMATION NOTE: FOOD SECURITY CHALLENGES IN SUDAN

Source: ©FAO/Antonello Proto
8.1. Trade import dependency

- **Foodstuffs**: Sudan heavily relies on imports from the Russian Federation and Ukraine that supplied 80 percent and 90 percent of total wheat and sunflower oil import quantity respectively on average between 2016 and 2020 (Figure 49 and 50).48

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**Figure 49: Total import quantity of selected commodities (2016–2020 average)**

![Graph showing import quantities of wheat and sunflower oil (2016–2020 average)](image)

- **Wheat**: 2,174,681 tonnes
- **Sunflower oil**: 115,644 tonnes


» **Fertilizers**: According to IFPRI, 6 percent, 5 percent and 3 percent of total nitrogen, phosphorus and potassium fertilizers imports respectively are from the Russian Federation. The potential shortage and high price of fertilizers could decrease fertilizer use and cause lower productivity.

### 8.2. Price increase

» Domestic wheat price has been increasing exponentially since 2019 even prior to the conflict (Figure 51). Most recently, between January and March 2022, the average wholesale price increased by 12.4 percent within 3 months.

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**Figure 50**: Import dependency of selected commodities (2016–2020 average)

![Import dependency of selected commodities](source: FAO)

**Figure 51**: Wheat wholesale price (Sudanese Pound/kg, 4 markets average, Apr 2019–Mar 2022)

![Wheat wholesale price](source: FAO)

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8.3. Food reserve

As the following figures indicated, Sudan had steady domestic supply quantity of wheat-related products (around 2.7 million tonnes in 2019). The opening stocks of wheat in 2019 shows that wheat reserves cover nearly one year of domestic supply (Figure 52 and 53).

**Figure 52: Domestic supply quantity (thousand tonnes)**

![Domestic supply quantity graph](source)


**Figure 53: Opening stocks (thousand tonnes)**

![Opening stocks graph](source)

8.4. Food insecurity and undernourishment

» **Food insecurity**: Sudan is one of the most vulnerable countries to the increasing price for staple food, leading to food insecurity. Figure 54 indicates an estimated 21.2 million people in Sudan experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 5.1 million, or 32 percent compared with 2015 (3-year average of 2014–2016).⁵⁰

» Prevalence of moderate or severe food insecurity in the total population stood at 49.4 percent, one of the highest in the region.

» **Undernourishment**: The number of undernourished in Sudan reached 5.3 million people in 2019, an increase of 0.9 million, 20 percent compared with 2015. The prevalence of undernourishment has risen from 11.2 percent in 2015 to 12.3 percent in 2019.

![Figure 54: Number of moderately or severely food insecure people and undernourished people](source)

Source: Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

» Nearly 20 million people will possibly be classified as facing “emergency” or “crisis” levels of “acute food insecurity” in 2022, double 2021’s figure (WFP).⁵¹

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8.5. Food waste

» According to WFP in Sudan, an estimated 30 percent of all crops harvested in Sudan are lost due to traditional storage. This is equivalent to USD 1 billion of annual loss and approximately 4 million tonnes of food go to waste. Reduction of food waste can potentially alleviate the country’s food shortage challenge.

8.6. Government’s response to current challenges

» Until March 2022, there has not been any specific governmental action taken in terms of export ban, macro-economic policy, food stock or trades.
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN JORDAN
9.1. Trade import dependency

» **Foodstuffs**: Jordan is a country highly depending on imports of staple foods and its cereal import dependency is around 90 percent.\(^{53}\) It clearly indicates that food security could be at high risk if trade flows are disturbed. Jordan imports nearly 90 percent of domestic consumption of selected crops below (Figure 55) and among them wheat and barley heavily relies on imports from the Russian Federation and Ukraine that supplied 20 percent and 50 percent of total wheat and barley import quantity respectively on average between 2016 and 2020 (Figure 56).\(^{54}\) Comparatively maize shows lower import dependency rate (3 percent) on the two countries.

**Figure 55**: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Import Quantity (tonne, 2016–2020 average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>1,164,871</td>
</tr>
<tr>
<td>Barley</td>
<td>1,069,871</td>
</tr>
<tr>
<td>Maize</td>
<td>823,056</td>
</tr>
</tbody>
</table>


» **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, Tunisia imported only 0.1 percent and 3.0 percent respectively of nitrogen and potassium fertilizers from the Russian Federation and Belarus.55

### 9.2. Price increase

» Food price at consumer level in Jordan has shown a strong increase since 2017 (Figure 57). Food prices are almost at the highest in the past 5 years and the indices illustrate an increase by 6.2 percent in the period 2017–2021.

» For instance, retail vegetable oil price has been increasing drastically since 2020 even prior to the conflict (Figure 58). Most recently, it hit the highest and it increased by 24 percent in the past 2 years.

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9.3. Food reserve

As Figure 59 indicates, Jordan had seen increasing domestic supply quantity of barley and maize-related products (0.9 million and 0.8 million tonnes in 2019 respectively) whilst the one of wheat-related products stayed relatively stable (1.0 million tonnes in 2019). The opening stocks between 2010 and 2019 show that the selected crop reserves were around 0.1 million tonnes, equivalent to one to three months of domestic supply quantity (Figure 60).
Most recently, however, Anwar Ajarmeh, chairman of the Jordan’s General Company for Silos and Supply, addressed that storage of imported wheat in Jordan could sufficiently supply the domestic market for 15 months. Additionally, he also said storage of barley could meet the domestic demands for consumption for 11 months (01 March 2022).56

**Figure 59: Domestic supply quantity (thousand tonnes)**

![Figure 59](image_url)


**Figure 60: Opening stocks (thousand tonnes)**

![Figure 60](image_url)


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56 [https://www.arabnews.com/node/2034076/middle-east](https://www.arabnews.com/node/2034076/middle-east)
9.4. Food insecurity

» Food security and malnutrition risks remain high at the country level in Jordan. The number of undernourished in Jordan reached 1.0 million people in 2019, an increase of 0.4 million, or 40 percent compared with 2015 (Figure 61). The prevalence of undernourishment has risen from 6.3 percent in 2015 to 9.5 percent in 2019. The risk of increasing price for staple food could have large impacts on food security.

![Figure 61: Number and prevalence of undernourished people](https://www.fao.org/faostat/en/#data)

Source: Based on FAOSTAT, 2022. The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

9.5. Food waste

» According to a 2019 study, an estimated 34 percent of the total wheat supply in Jordan is lost or wasted, which is equivalent to a loss of USD 105 million per year.57

» A recent 2021 study further indicates that around 940 thousand tonnes of household food are wasted per year in Jordan.58 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

57 Yigezu, A.Y. 2019. Where in the value chain are we losing the most food? The case of wheat in Jordan.

9.6. Government’s response to current challenges

» **Alternative trade partner:** The Jordan Chamber of Commerce said that importers should start looking for alternative trade partners aside from Ukraine and the Russian Federation (07 March 2022).59

» **Food subsidy:** Industry Ministry Spokesperson Yanal Barmawi said “as always the government will continue to provide bread subsidies”60 (13 March 2022)

» **Price control:** Barmawi said Industry ministry set a price ceiling for essential commodities, including sunflower oil, to avoid excessive price hikes (13 March 2022).61

» **Modification of food stock:** Jordan’s state grain buyer issued an international tender to purchase 120,000 tonnes of milling wheat (17 March 2022).62

59 https://en.ammonnews.net/article/56490?msclkid=8f5ea3dd43011ebe780c60b73fd6f3
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN MOROCCO
10.1. Trade import dependency

» **Foodstuffs**: Morocco has diversified sources for cereal imports (Figure 62). Among all, the Russian Federation and Ukraine represent 19 percent of all cereal imports for Morocco.

» Wheat, maize and barley are the main grains imported by Morocco (Figure 63). Wheat whose average annual import volume is around 5 million tonnes, relies mostly on the Russian Federation and Ukraine that supplied 29 percent of total wheat import quantity between 2016 and 2020 (Figure 64).\(^3\) Import of soft wheat had relatively more reliance on the two countries (35 percent, Figure 65).

» Imports of maize and barley have lower dependency on the Russian Federation and Ukraine (3 percent and 12 percent respectively of import shares). Sunflower seed and rapeseed that have high import dependency from the two countries could be affected at smaller scale due to their smaller quantity of import.

» Import of seeds oil from the Russian Federation accounted for 15 percent in the entire import quantity (Figure 66).

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Figure 63: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>5,088,977</td>
</tr>
<tr>
<td>Maize</td>
<td>2,552,294</td>
</tr>
<tr>
<td>Barley</td>
<td>905,454</td>
</tr>
<tr>
<td>Soybeans</td>
<td>108,176</td>
</tr>
<tr>
<td>Sunflower seed</td>
<td>24,163</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>73</td>
</tr>
</tbody>
</table>


Figure 64: Import dependency of selected crops (2016–2020 average)

[Graph showing import dependency]

Source: Calculated using data from FAOSTAT, 2022.
**Figure 65**: Share of soft wheat import to Morocco (average of quantity trade, 2017–2021)

Source: Based on UN COMTRADE database, 2022. [https://comtrade.un.org/data/](https://comtrade.un.org/data/)

**Figure 66**: Share of seeds oil exports to Morocco (average of value trade, 2017–2021)

Source: Based on UN COMTRADE database, 2022. [https://comtrade.un.org/data/](https://comtrade.un.org/data/)

» **Fertilizers**: According to the UN COMTRADE database available for 2018–2020, Morocco imported respectively 42.7 percent and 53.8 percent of nitrogen and potassium fertilizers on average from the Russian Federation and Belarus (Figure 67).[^64]

10.2. Price increase

» Food price at consumer level in Morocco has shown fluctuation since 2017 (Figure 68) and the most recently available indices from September 2021 indicate an upward trend of prices.

10.3. Food reserve

» As Figure 69 indicates, Morocco had a large domestic supply quantity of wheat-related products (9.8 million tonnes in 2019) whilst that of maize and barley products stayed around 2-3 million tonnes (2.7 million and 2.2 million tonnes in 2019 respectively). The opening stocks between 2010 and 2019 show that the country put more focus on wheat reserves that were around 5.5 million tonnes, equivalent to 5 to 6 months of domestic supply quantity (Figure 70).

» Recently, the Moroccan government said a stock of soft wheat to cover more than four and half months (15 March 2022).65

Figure 69: Domestic supply quantity (thousand tonnes)

![Figure 69: Domestic supply quantity (thousand tonnes)](https://www.fao.org/faostat/en/#data)


Figure 70: Opening stocks (thousand tonnes)

![Figure 70: Opening stocks (thousand tonnes)](https://www.fao.org/faostat/en/#data)


65 https://www.moroccoworldnews.com/2022/03/347675/morocco-to-control-food-market-prices-during-ramadan?msclkid=694fb892b4c611ecbd57294b9403af1d
10.4. Food insecurity

- **Food insecurity:** Figure 71 indicates an estimated 10.2 million people in Morocco experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), an increase of 0.6 million compared to the previous year.

- **Undernourishment:** The number of undernourished in Morocco had remained the same and it increased by 0.2 million people in 2019.

![Figure 71: Number and prevalence of undernourished people](source)

**Source:** Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

10.5. Food waste

- According to a 2016 study, an estimated 45 percent of all food in Morocco is wasted every year.66

- A recent 2021 study indicates that around 3.3 million tonnes of household food are estimated to be wasted per year in Morocco.67 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

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10.6. Government’s response to current challenges

» Food stock: The Minister Delegate in charge of Relations with Parliament, Government Spokesperson, Mustapha Baitas said at a press briefing “This conflict will have no impact on the Moroccan market supply and the availability of necessary food”. He also stated that the Moroccan government has already taken an action to source large volume of wheat between January and February 2022 (24 February 2022).68

» Food subsidy: The Minister Delegate to the Minister of Economy and Finance, in charge of the Budget, indicated that the government will mobilize more than 15 billion dirhams (USD 1.5 billion) additionally this year, to support the purchasing power of consumers and therefore prevent the rise in the selling price of gas, wheat flour and transport, mainly due to the war between the Russian Federation and Ukraine (14 March 2022).69

» Modification of export quota: Morocco is reducing tomato exports to Europe to keep the local market adequately supplied and prevent rising tomato prices heading into Ramadan. Tomato demands tend to peak during the month of Ramadan. Morocco’s annual exports of tomatoes to the European Union are set at 430,000 tonnes, making the country the union’s largest outside supplier (15 March 2022).70

» Unconditional cash transfer: Moroccan government started subsidies for transport professionals to reduce the effects of soaring energy prices and 180,000 professionals are expected to benefit from this support (01 April 2022).71

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70 https://www.moroccoworldnews.com/2022/03/347686/morocco-to-curb-tomato-exports-ahead-of-ramadan
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN SYRIAN ARAB REPUBLIC
11.1. Trade import dependency

» **2016-2020**: The Syrian Arab Republic used to reach a high self-sufficient level in providing some grains such as wheat and barley. In terms of quantity, wheat, maize and barley are the main grains imported to the country (Figure 72). Among them, wheat and barley rely on imports from the Russian Federation that supplied 26 percent and 73 percent of total wheat and barley import quantity respectively between 2016 and 2020 (Figure 73).\(^2\) On the other hand, 8 percent of maize comes from Ukraine.

» **2021**: However, the situation of self-sufficiency of grain drastically deteriorated due to internal conflicts in Syria and the country required 1.5 tonnes of wheat to import, which were mainly sourced from the Russian Federation in 2021.\(^3\) Recently, the import dependency significantly increased.

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**Figure 72: Total import quantity of selected crops (2016–2020 average)**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Import Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>327,576</td>
</tr>
<tr>
<td>Maize</td>
<td>270,862</td>
</tr>
<tr>
<td>Barley</td>
<td>174,206</td>
</tr>
</tbody>
</table>


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\(^3\) https://npasyria.com/en/68780/
Fertilizers: According to IFPRI, 4 percent, 2 percent and 3 percent of total nitrogen, phosphorus and potassium fertilizers imports respectively could be affected by the Russia-Ukraine conflict due to the current export bans. However, potential higher price of fertilizers could decrease fertilizer use and cause lower productivity.

11.2. Price increase

Retail price of wheat flour has been increasing exponentially since 2020 in the Syria Arab Republic even prior to the conflict (Figure 74). In the period 2021 and 2022, the average retail price increased by 84 percent in a year.


Source: Calculated using data from FAOSTAT, 2022.


74 https://public.tableau.com/app/profile/laborde6680/viz/ExportRestrictionsTracker/FoodExportRestrictionsTracker
11.3. Food reserve

According to the available FAO data (Figure 75 and 76), the Syrian Arab Republic faced a lack of food stocks in 2019 while domestic supply were increasing.

**Figure 75: Domestic supply quantity (thousand tonnes)**


**Figure 76: Opening stocks (thousand tonnes)**

11.4. Food insecurity

» **Food insecurity:** The food insecurity level is extremely high in the Syrian Arab Republic prior to the Ukraine conflict. According to WFP, the number of Syrians who do not have access to sufficient food reached 12.4 million, 55 percent of its total population in 2022. The number increased by 1.2 million people in a year.

11.5. Food waste

» A 2021 study indicates that around 1.7 million tonnes of household food are estimated to be wasted per year in the Syrian Arab Republic. Reduction of food waste can potentially alleviate the country’s food shortage challenge.

11.6. Government’s response to current challenges

» **Trade offer:** The government has been offered wheat export by the Autonomous Republic of Crimea and the city of Sevastopol, Ukraine, temporarily occupied by the Russian Federation and is considering the offer with close attention to distribution of commodities in the country (24 February 2022).

» **Food stock:** Officials of the Syrian government decided to manage stocks of main staples including wheat, sugar, cooking oil and rice for the next two months (25 February 2022). The Ministry of Internal Trade said that no concerns arise about wheat reserves in the country since harvesting season for wheat is approaching and citizens can benefit with better prices than the market prices (19 March 2022).

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75 https://api.godocs.wfp.org/api/documents/b6b8eb75af444bf5056a586154178075/download/?_ga=2.99306910.1263015047.1649165846-1853661622.1645192175
78 https://english.ahram.org.eg/NewsContent/54/1247/461734/War-in-Ukraine/Economy/Russia;s-invasion-of-Ukraine-prompts-Syria-to-cut.aspx?msclkid=9892a3beb4711ecb800a79811e5a7
79 https://gulfnews.com/world/mena/syria-says-no-worries-about-wheat-reserves-1.164765990136?msclkid=6d7ce588b4711ec9a9ac04990942cd8
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN UNITED ARAB EMIRATES

Source: ©FAO/FameMedia
12.1. Trade import dependency

**Foodstuffs**: The United Arab Emirates (UAE) imports 80 to 90 percent of foods the country consumes, particularly cereals (i.e. 100 percent, 97 percent, 100 percent for wheat, maize and barley respectively in 2020 (FAO)). It clearly indicates that food security could be at high risk if trade flows are disturbed. The country imports wheat, maize and barley at large scale to meet their consumption (Figure 77). Among them, wheat heavily relies on imports from the Russian Federation that supplied 34 percent of total wheat import quantity between 2016 and 2020 (Figure 78).80

**Figure 77: Total import quantity of selected crops (2016–2020 average)**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>1,387,257</td>
</tr>
<tr>
<td>Maize</td>
<td>532,875</td>
</tr>
<tr>
<td>Barley</td>
<td>426,551</td>
</tr>
</tbody>
</table>


Figure 78: Import dependency of selected crops (2016–2020 average)

Source: Calculated using data from FAOSTAT, 2022.

- **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, UAE imported respectively 6.1 percent and 25.2 percent of nitrogen and potassium fertilizers from the Russian Federation and Belarus (Figure 79).

Figure 79: Dependency on Fertilizers Originating from Belarus and the Russian Federation, 2018–2020


**12.2. Price increase**

- Food price at consumer level in UAE has shown a strong increase between 2015 and 2021 (Figure 80). The price indices illustrate an increase by 10.2 percent during this period.
12.3. Food reserve

As Figure 81 illustrates, UAE had fluctuating domestic supply quantity of wheat-related products (1.9 million and 1.0 million tonnes in 2012 and 2019 respectively) whilst that of maize and barley products remained under 1.0 million tonnes (0.5 million and 0.2 million tonnes in 2019 respectively). The opening stocks show that the country recently put more focus on wheat reserves that were around 0.5 million tonnes in 2019, equivalent to approximately 6 months of domestic supply quantity (Figure 82).
12.4. Food insecurity

The number of undernourished in the UAE represented 0.3 to 0.4 million people between 2015 and 2019. The prevalence of undernourishment has risen from 2.7 percent in 2015 to 3.7 percent in 2019 (Figure 83). The risk of increasing the price for staple food could potentially bring negative impacts on food security.
12.5. Food waste

» Food waste is a pivotal issue in the UAE. Based on the research by Dubai Carbon, the UAE ranks among one of the top countries for per capita waste generation all over the world. Approximately 38 percent of the food in the UAE is wasted every day.81 Another study from UNEP indicates that around 0.9 million tonnes of household food are estimated to be wasted per year.82 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

12.6. Government’s response to current challenges

» There hasn’t been specific governmental action taken in terms of macro-economic policy, food stock or trades.

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81 https://dcce.ae/press_releases/our-food-is-damaging-the-environment/?msclkid=adc79a13b52311ecaf2e65d705dd0dc
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN KUWAIT
13.1. Trade import dependency

**Foodstuffs:** Kuwait heavily depends on imports to meet its food demands. It clearly indicates that food security could be at high risk if trade flows are disturbed. The country imported grains such as approximately 0.8 million tonnes of barley, 0.6 million tonnes of wheat and 0.2 million tonnes of maize on average per year between 2016 and 2020 (Figure 84). Import dependency on the Russian Federation and Ukraine is not as high as other Arab countries such as Egypt. 20 percent of total barley imports came from the Russian Federation and Ukraine while imports of wheat and maize from these two countries were minimal (Figure 85).83

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**Figure 84:** Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>791,644</td>
</tr>
<tr>
<td>Wheat</td>
<td>565,305</td>
</tr>
<tr>
<td>Maize</td>
<td>180,341</td>
</tr>
</tbody>
</table>


Fertilizers: According to the UN COMTRADE database available for 2018–2020, Kuwait imported respectively 2.4 percent and 39.8 percent of nitrogen and potassium fertilizers from the Russian Federation and Belarus on average (Figure 86).

13.2. Price increase

Food price at consumer level in Kuwait has shown a strong increase since late 2019, prior to the conflict (Figure 87). During the period of 2019–2021, the price indices increased by 13.9 percent.
13.3. Food reserve

» As shown in Figure 88, Kuwait had an increasing domestic supply quantity of barley and wheat-related products (approximately 0.3 million and 0.4 million tonnes respectively) whilst that of maize-related products kept around 0.2 million tonnes. Although barley had been supplied in large quantity, stocks had remained minimal. The country had the largest reserves for wheat that represented around 0.3 million tonnes in 2019, equivalent to around 8 months of domestic supply quantity (Figure 89).

» In February 2022, the Kuwaiti government stated that there would be no food shortage in the event of this conflict. Additionally, the primary commodities reserves could cover a period ranging between 6 and 12 months.84

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84 https://www.arabtimesonline.com/news/no-food-shortage-in-case-war-breaks-out/?msclkid=6a59bc37b57b11ec876cbdd8210fa4a5
13.4. Food insecurity

» The number of moderately or severely food insecure people in Kuwait remained the same at 0.5 million people between 2015 and 2019. The prevalence of which had gradually been decreasing from 12.6 percent in 2015 to 12.2 percent in 2019 (Figure 90). However, the risk of increasing prices for staple food could potentially bring negative impacts on food security.
13.5. Food waste

Food waste has economic impacts in Kuwait. Based on the 2021 report from UNEP, almost 0.4 million tonnes of household food, equivalent to 95 kg per capita, are wasted every year in Kuwait. Reduction of food waste can potentially alleviate the country’s food shortage challenge.

13.6. Government’s response to current challenges

There hasn’t been specific governmental action taken in terms of macro-economic policy, food stock or trades.

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**Figure 90: Number and prevalence of moderately or severely food insecure people**

Source: Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

**Figure 97**


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INFORMATION NOTE: FOOD SECURITY CHALLENGES IN SAUDI ARABIA
ADDRESSING FOOD SECURITY CHALLENGES FACED BY NEAR EAST AND NORTH AFRICA REGION DUE TO THE UKRAINE CRISIS
14.1. Trade import dependency

- **Foodstuffs**: Saudi Arabia heavily depends on imports to meet its food demands. It clearly indicates that food security could be at high risk if trade flows are disturbed. Figure 91 shows the average volume of total imports of selected crops between 2016 and 2020: barley, maize and wheat. Among three, imports of barley had high dependency on the Russian Federation and Ukraine. 41 percent of total barley imports came from these two countries while imports of wheat and maize from the countries ranged from 1 to 5 percent (Figure 92).[^86]

**Figure 91**: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>6,757,992</td>
</tr>
<tr>
<td>Maize</td>
<td>3,329,805</td>
</tr>
<tr>
<td>Wheat</td>
<td>1,998,355</td>
</tr>
</tbody>
</table>


Figure 92: Import dependency of selected crops (2016–2020 average)

Source: Calculated using data from FAOSTAT, 2022.

> **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, Saudi Arabia imported respectively 3.2 percent and 2.6 percent of total nitrogen and potassium fertilizers from the Russian Federation and Belarus on average.

### 14.2. Price increase

> Retail price of wheat flour has been steadily increasing since 2015 in Saudi Arabia prior to the Russia-Ukraine conflict (Figure 93). In the period 2021 and 2022, the average retail price of wheat flour increased by 18 percent in a year. Retail price of bread has been relatively stable, though an increase of price had been recognized periodically (Figure 94).

Figure 93: Wheat flour (white) retail price, Saudi Riyal/kg, national average (Feb 2015–Feb 2022)

14.3. Food reserve

- As Figure 95 illustrates, Saudi Arabia had an elastic domestic supply quantity of barley-related products whilst that of wheat and maize-related products had been stabilized. The country had the largest reserves for barley that were around 3.1 million tonnes in 2019, equivalent to around 8 months of domestic supply quantity (Figure 96). Though wheat reserves could also cover almost 8 months of domestic demands, maize reserves could only supply for around 3 months.

- In February 2022, the Saudi Arabian government stated that there are no concerns of food shortage amid this conflict and stocks of basic food commodities including barley, wheat and maize are at safe levels.87

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87 https://www.reuters.com/article/ukraine-crisis-saudi-commodities-int-idUSKBN2KK0EO?msclkid=694a71efb5b811ec3800c448ef96883
14.4. Food insecurity

The number of undernourished people in Saudi Arabia remained almost the same at 1.2-1.3 million people between 2015 and 2019. The prevalence of which had shown the same trend as it slightly increased from 3.7 percent in 2015 to 3.9 percent in 2019 (Figure 97). However, the risk of increasing prices for staple food could potentially bring negative impacts on food security.

**Figure 96: Opening stocks (thousand tonnes)**

![Figure 96: Opening stocks (thousand tonnes)](source)


**Figure 97: Number and prevalence of undernourished people**

![Figure 97: Number and prevalence of undernourished people](source)

**Source:** Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.*
14.5. Food waste

» Food waste has significant economic impacts in Saudi Arabia. Ministry of Environment, Water and Agriculture estimated its cost at Saudi Riyal 40 billion.88 According to a 2021 study, the country’s overall food loss and waste rate is 33.1 percent in which the food waste rate is 18.9 percent.89

Based on the 2021 report from UNEP, almost 3.6 million tonnes of household food, equivalent to 105 kg per capita, are wasted every year in Saudi Arabia.90 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

14.6. Government’s response to current challenges

» Finance: The Saudi Agriculture Development Fund approved loans, which were worth over USD 229 million to finance working capital for the import of agricultural products in order to strengthen food security in the Kingdom. The objective of the finance is to stabilize international developments, to ensure sufficient stocks and stability of food supplies, and to avoid any interruption in its supply chains. The crops targeted included barley, maize and soybeans.91 (18 March 2022)

» Energy: Saudi Arabia’s state oil producer is set to hike oil prices across regions as the demands increased.92

88 https://www.arabnews.com/node/1654461/saudi-arabia
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN QATAR
15.1. Trade import dependency

» **Foodstuffs**: Qatar is a country importing food to meet most of its domestic supply, hence food security could be at risk if trade flows are disturbed. Figure 98 shows the average volume of total imports of selected crops between 2016 and 2020: barley, wheat and maize. Among these three, imports of barley and wheat had high dependency on the Russian Federation and Ukraine. 34 percent and 42 percent of total barley and wheat imports came from the two countries while import ratio of maize from the countries is 11 percent (Figure 99).\(^3\)


**Figure 98**: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Total Import Quantity (tonne, 2016-2020 average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>320 766</td>
</tr>
<tr>
<td>Wheat</td>
<td>206 752</td>
</tr>
<tr>
<td>Maize</td>
<td>74 111</td>
</tr>
</tbody>
</table>

Addressing Food Security Challenges Faced by Near East and North Africa Region due to the Ukraine Crisis

Figure 99: Import dependency of selected crops (2016–2020 average)

Source: Calculated using data from FAOSTAT, 2022.

» Fertilizers: According to the UN COMTRADE database available for 2018–2020, Qatar imported 14.2 percent of total potassium fertilizers from the Russian Federation and Belarus.

15.2. Price increase

» Before the Ukraine crisis, food prices at consumer level in Qatar had been increasing and most recently between March 2021 and September 2021, it had shown a strong spike with an increase by 4.0 percent, in only 6 months (Figure 100).

Figure 100: Consumer Prices, Food Indices (2015=100)

15.3. Food reserve

» According to Qatar National Food Security Strategy 2018 – 2023 presented by the Food Security Department, annual domestic consumption of wheat is 210 thousand tonnes and most of it relies on imports.

» On 01 March 2022, the Ministry of Municipality stated that food security in the country is stabilized and the stock of wheat and grains can cover sufficiently 6 months ahead.94

15.4. Food insecurity

» Although Qatar has one of the best food security in the Arab region (ranked 24th in the world in the Global Food Security Index 2021),95 the country is still vulnerable against disruption of imports due to its high dependency on import. According to the study from Middle East Institute Singapore in 2018, Qatar imports 90 percent of its food supply.96

15.5. Food waste

» Based on the 2021 report from UNEP, almost 0.3 million tonnes of household food, equivalent to 95 kg per capita, are wasted every year in Qatar.97 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

15.6. Government’s response to current challenges

» **Trades:** The government said, prior to the crisis, the national strategy of the State of Qatar has advised to diversify the sources of import for strategic commodities, therefore each commodity has 3 to 5 different sources from different countries and the country can look for alternatives from several sources comfortably (01 March 2022).98

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94 www.wgoqatar.com/182919?msclkid=36c8caebb63e11ecbd4306d77a0a1fee
95 https://impact.economist.com/sustainability/project/food-security-index/Index#:~:text=The%20Global%20Food%20Security%20Index%20%28GFSI%29%20assesses%20food%20security%20based%20on%20affordability%2C%20availability%2C%20quality%20and%20safety%20metrics%20worldwide.?msclkid=6f89c75fb6411ec803b2741e7054062
96 Miniaoui. H. et al., 2018. Contemporary issues in Qatar’s food security.
98 www.wgoqatar.com/182919?msclkid=36c8caebb63e11ecbd4306d77a0a1fee
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN BAHRAIN
16.1. Trade import dependency

- **Foodstuffs**: Bahrain is a country importing food to meet most of its domestic supply, hence food security could be at risk if trade flows are disturbed. Figure 101 shows the average volume of total imports of selected crops between 2016 and 2020: wheat, maize and barley. Among these three, barley was sourced from Ukraine that supplied 14 percent of total barley imports of Bahrain (Figure 102).\(^9\)


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**Figure 101**: Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crops</th>
<th>Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>144,726</td>
</tr>
<tr>
<td>Maize</td>
<td>16,737</td>
</tr>
<tr>
<td>Barley</td>
<td>2,111</td>
</tr>
</tbody>
</table>

16.2. Price increase

Before the Ukraine crisis, food prices at the consumer level in Bahrain had been increasing. Between 2015 and 2021, it had shown an increase by 12.4 percent (Figure 103).

Figure 103: Consumer Prices, Food Indices (2015=100)


Fertilizers: According to data provided by IFPRI, Bahrain sources minimal amount of fertilizers imported from the Russian Federation and Belarus.100
16.3. Food reserve

» Bahrain currently increased the total supply of wheat to 151 thousand tonnes after the sharp plunge in 2020/21 season (Figure 104).\textsuperscript{101} As wheat supply surged, stocks decreased in the same period (Figure 105).\textsuperscript{102} At this point, it implies that the wheat stock in the country could only meet demands for 1-2 months.

» On 28 March 2022, the local newspaper cited the comment from Bahrain’s flour mill company saying Bahrain’s wheat reserves are sufficient for more than 4 months of consumption.\textsuperscript{103}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{bahrain-wheat-supply.png}
\caption{Bahrain total supply of wheat (thousand tonnes)}
\end{figure}

\textit{Source: AgroChart.com, 2022.}

\textsuperscript{101} https://www.AgroChart.com, 2022./en/usda/section/37/grains/country/14/bahrain/commodity/1/wheat/attribute/9/total-supply/

\textsuperscript{102} https://www.agrochart.com/en/usda/section/37/grains/country/14/bahrain/commodity/1/wheat/attribute/9/total-supply/

\textsuperscript{103} https://www.agrochart.com/en/usda/section/37/grains/country/14/bahrain/commodity/1/wheat/attribute/3/beginning-stocks/?msclkid=856eb979b64a11e8e42005c82b3b106
16.4. Food insecurity

Although Bahrain has one of the best food security in the Arab region, the country is still vulnerable against disruption of imports and could be exposed to risks of shortage of food supply due to its high dependency on import.

16.5. Food waste

Issues around food waste heavily impact the economy. Based on the report from UNEP (2021), Bahrain ranked top in the Arab region for food wastage. Almost 0.2 million tonnes of household food, equivalent to 132 kg per capita, are wasted every year in Bahrain. Reduction of food waste can potentially alleviate the country’s food shortage challenge.

16.6. Government’s response to current challenges

There hasn’t been specific governmental action taken in terms of macro-economic policy, food stock or trades.

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INFORMATION NOTE: FOOD SECURITY CHALLENGES IN ALGERIA
17.1. Trade import dependency

» **Foodstuffs:** Algeria has multiple sources for cereal imports, including Ukraine that provided 4.0 percent of total cereal imports between 2017 and 2021 (Figure 106). Furthermore, Maize, barley and wheat are main grains imported to Algeria (Figure 107). Among them, maize whose average annual import volume is around 4.5 million tonnes, relies on imports from the Russian Federation and Ukraine that supplied 8 percent of total maize import quantity between 2016 and 2020 (Figure 108). Similarly, 23 percent of total imports of barley are sourced from the two countries, whilst wheat/soft wheat has minimal import dependence (Figure 109).\(^{105}\)

» Figure 110 shows that seeds oil had been largely imported to Algeria from the two countries (93 percent of total trade value).

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**Figure 106: Cereal imports to Algeria (2017–2021 average)**

**Figure 107:** Total import quantity of selected crops (2016–2020 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>4,521,321</td>
</tr>
<tr>
<td>Barley</td>
<td>1,004,952</td>
</tr>
<tr>
<td>Wheat</td>
<td>144,726</td>
</tr>
</tbody>
</table>


**Figure 108:** Import dependency of selected crops (2016–2020 average)

Source: Calculated using data from FAOSTAT, 2022.
**Figure 109:** Share of soft wheat imports to Algeria (average of quantity 2017–2021)


**Figure 110:** Share of seeds oil imports to Algeria (average of trade value 2017–2021)


» **Fertilizers:** According to the UN COMTRADE database available for 2018–2020, Algeria imported respectively 17.4 percent and 7.5 percent of nitrogen and potassium fertilizers from the Russian Federation and Belarus on average (Figure 111).
17.2. Price increase

» Before the Ukraine crisis, food prices at consumer level in Algeria had been soaring. Between 2015 and 2021, it had shown an increase by 24.5 percent (Figure 112).

17.3. Food reserve

» Algeria is the second largest wheat consumer after Egypt in the region. As shown in Figure 113, Algeria had a stable domestic supply quantity of all three grains. In 2019, supply of wheat was the largest (10.5 million tonnes) and the same is applied to stock volume (4.2 million tonnes). Reserves of maize and barley appeared to be minimal in the period 2014-2019, demonstrating high vulnerability to trade disruption (Figure 114).
In March 2022, it was announced by Algeria’s Minister of Agriculture and Rural Development that the country reserved adequate grains to last until the end of this year.\textsuperscript{106}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure113.png}
\caption{Domestic supply quantity (thousand tonnes)}
\end{figure}


\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure114.png}
\caption{Opening stocks (thousand tonnes)}
\end{figure}


### 17.4. Food insecurity

- **Food insecurity:** Figure 115 indicates an estimated 7.6 million people in Algeria experienced moderate or severe food insecurity in 2019 (3-year average of 2018–2020), a decrease of 1.5 million compared to that in 2015.

- **Undernourishment:** The number of undernourished in Algeria had been 1.1 million until 2017.

\textsuperscript{106} https://www.nasdaq.com/articles/algeria-has-enough-grain-reserves-until-year-end-apr
17.5. Food waste

- Issues around food waste heavily impact the economy. Based on the report from UNEP (2021), about 3.9 million tonnes of household food, equivalent to 91 kg per capita, are wasted every year in Algeria.\(^{107}\) Reduction of food waste can potentially alleviate the country’s food shortage challenge.

17.6. Government’s response to current challenges

- **Export ban:** Algeria has banned exports of all consumer products that Algeria imports, such as sugar, pasta, oil, semolina and all wheat derivatives. Not only Algerian economic operators are not allowed to export food products made from imported raw materials, but also they risk legal action in case of infringement (14 March 2022).\(^{108}\)

- **Purchase of wheat:** Since mid-February, before the conflict started, the Algerian Interprofessional Office of Cereals (OAIC) has consecutively purchased large amount of milling wheat (0.7 million tonnes in mid-February, 0.6-0.7 million tonnes in early March, and around 0.6 million tonnes now in process).\(^{109}\)

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\(^{108}\) www.africanews.com/2022/03/14/algeria-bans-export-of-food/

\(^{109}\) www.graincentral.com/markets/algeria-feels-the-cost-of-drought-and-war/?msclkid=04e93e59%6591ec9d0524b4b29068a
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN IRAQ

Source: ©FAO/Cengiz Yar
18.1. Trade import dependency

» **Foodstuffs:** Imports of grains had been concentrated on wheat and maize between 2016 and 2020 as shown in Figure 116. 14 percent of total imports of maize were sourced from the Russian Federation and Ukraine and 14 percent of total imports of barley solely relied on the Russian Federation (Figure 117). Rapeseed had the highest import dependency on Ukraine, however, the impacted volume could be minimal as the average import quantity was only 19 tonnes based on the data.¹¹⁰

**Figure 116: Total import quantity of selected crops (2016–2020 average)**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>889,377</td>
</tr>
<tr>
<td>Maize</td>
<td>488,046</td>
</tr>
<tr>
<td>Sunflower seed</td>
<td>58,844</td>
</tr>
<tr>
<td>Barley</td>
<td>28,381</td>
</tr>
<tr>
<td>Soybeans</td>
<td>402</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>19</td>
</tr>
</tbody>
</table>


Oil products: Iraq imported on average 651 tonnes of seeds oil between 2016 and 2020. Although it is a relatively smaller amount compared to grains, 44 percent of which came from Ukraine.

Fertilizers: According to the UN COMTRADE database available for 2018–2020, Iraq imported 42.6 percent of potassium fertilizers from the Russian Federation and Belarus on average (Figure 118).
18.2. Price increase

Before the Ukraine crisis, prices of wheat flour and vegetable oil at retail surged recently and had been highest, particularly for vegetable oil, since 2015. Between 2015 and 2022, prices increased by 38.8 percent and 68.2 percent (Figure 119 and 120).

**Figure 119: Wheat (flour) retail price, national average, Iraqi Dinar/kg**


**Figure 120: Vegetable oil retail price, national average, Iraqi Dinar/kg**

18.3. Food reserve

» As shown in Figure 121, Iraq had a large domestic supply quantity of wheat-related products (6.9 million tonnes in 2019). Besides, 3.5 million tonnes of wheat were stocked (Figure 122).

» Recently in March 2022, the Iraqi government announced that the country’s wheat stock do not cover more than 3 months of domestic consumption due to decreasing production in 2022 season.\footnote{https://esta.krd/en/141674/?msclkid=86f4b308b67a11ec940f50d76be51955}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure121}
\caption{Domestic supply quantity (thousand tonnes)}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure122}
\caption{Opening stocks (thousand tonnes)}
\end{figure}
18.4. Food insecurity

Iraq has faced harsh situation of food insecurity. The number of undernourished reached 14.7 million people in 2019, an increase of 1.3 million, 9.7 percent compared with 2015. The prevalence of undernourishment remains high, standing at around 40 percent (Figure 123).

Figure 123: Number and prevalence of undernourished people

![Figure 123: Number and prevalence of undernourished people](image)

Source: Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.


113 www.reuters.com/world/middle-east/official-iraq-allow-food-imports-three-months-state-news-agency-2022-04-06/?msclkid=86f50778b67a11ec90c8e8086ede80ef

18.5. Food waste

Issues around food waste heavily impact the economy. Based on the report from UNEP (2021), Iraq ranked second in the Arab region after Bahrain for food wastage. Almost 4.7 million tonnes of household food, equivalent to 120 kg per capita, are wasted every year in Iraq.112 Reduction of food waste can potentially alleviate the country’s food shortage challenge.

18.6. Government’s response to current challenges

Modification of food stock: The state news agency stated that the country will allow all food imports for 3 months to ensure food security. The trade ministry also addressed that the government is working to allocate 2 million tonnes of wheat for food reserves to sufficiently cover 6 months of consumption (06 April 2022).113
INFORMATION NOTE: FOOD SECURITY CHALLENGES IN PALESTINE
19.1. Trade import dependency

» **Foodstuffs**: According to the UN COMTRADE database, Palestine focused on importing wheat, barley and maize compared to other grains (Figure 124). Figure 125 shows that imports from the Russian Federation and Ukraine were mostly wheat/meslin accounting for 33 percent of the country’s total imports between 2016 and 2020.

![Figure 124: Total import quantity of selected crops (2016–2020 average)](source)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Total Import Quantity (tonne, 2016–2020 average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat and meslin</td>
<td>77,223</td>
</tr>
<tr>
<td>Barley</td>
<td>44,874</td>
</tr>
<tr>
<td>Maize</td>
<td>19,182</td>
</tr>
<tr>
<td>Sunflower</td>
<td>1,190</td>
</tr>
<tr>
<td>Soybeans</td>
<td>8</td>
</tr>
</tbody>
</table>


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Fertilizers: According to IFPRI data, in Palestine, the shares of imported fertilizers from countries currently imposing export bans are significantly high: 47 percent, 11 percent and 10 percent for nitrogen, phosphorus and potassium fertilizers respectively. The potential shortage and high price of fertilizers could decrease fertilizer use and cause lower productivity in the following years.

19.2. Price increase

Before the Ukraine crisis, food prices at consumer level in Palestine had been fluctuating between 2015 and 2021 (Figure 126). The price indices show the upward trend from March 2021 (an increase of 4.2 percent in the period March–September 2021).


19.3. Food reserve

» Official statements on food reserves have not been found.

19.4. Food insecurity

» Palestine has suffered from a high rate of food insecurity. The number of moderately or severely food insecure people reached 1.3 million people in 2019 and the prevalence of which stood at 26.3 percent (Figure 127).

![Figure 127: Number and prevalence of moderately or severely food insecure people](image)

Source: Based on FAOSTAT, 2022. https://www.fao.org/faostat/en/#data. *The numbers for each year in the figure above refer to the average of the numbers of three consecutive years from the previous year to the following year.

19.5. Food waste

» Based on the report from UNEP (2021), approximately 0.5 million tonnes of household food, equivalent to 101 kg per capita, are wasted every year in Palestine. Reduction of food waste can potentially alleviate the country’s food shortage challenge.

19.6. Government’s response to current challenges

» **Alternative trade partner:** The Prime Minister said that the country is searching for new suppliers of wheat such as Bulgaria and Australia, since the government needs to compensate for the gap from food shortages led by the conflict (29 March 2022).117


REFERENCES


Libya Observer. 2022. Bashagha: Russia’s attack on Ukraine is violation of international law. Text


