Food and Agriculture Organization of the United Nations

European Bank for Reconstruction and Development

EBRD/FAO technical cooperation package to support food security in the SEMED region

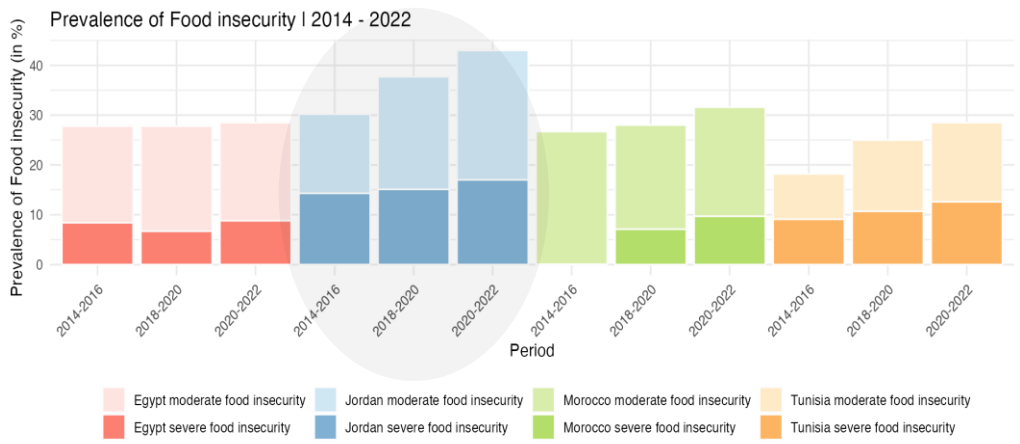
Key trends in the agrifood sector in Jordan

Overview

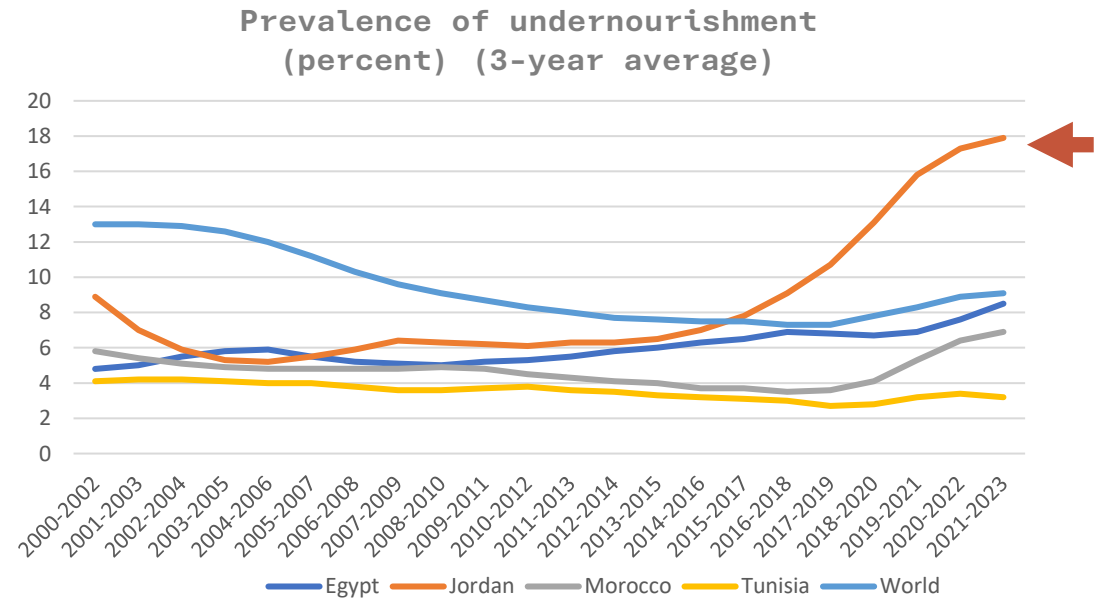
- Updates on food insecurity and malnutrition in Jordan.
- Local agrifood systems for improved agricultural productivity and food security.
- Agricultural trade: focusing on resilience to ensure food and nutrition security for all.
- Policy strategic direction.

Hunger, food insecurity and malnutrition have increased in the SEMED region

- The prevalence of undernourishment (PoU) increased from 5.2% in 2004/06 to 17.9% by 2021/23, the biggest increase among the four countries, and a rate higher than the world average.
- Jordan, like other countries, witnessed increasing levels of moderate and severe food insecurity.
- Mainly due to regional instability and refugees, COVID-19 and the war in Ukraine.



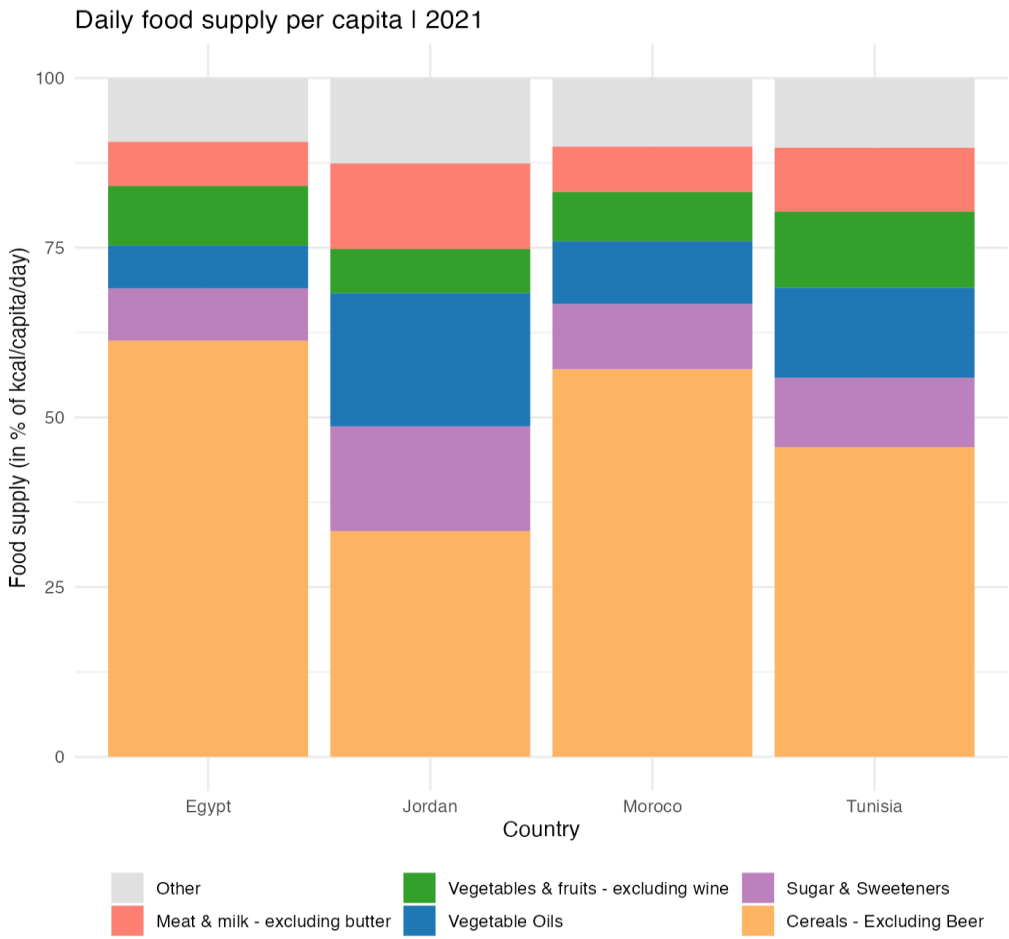
Source: FAO STAT, Data for Jordan: Regional Overview of Food Security and Nutrition 2023



Source: FAO STAT, SOFI, 2024

Sustained economic growth triggered the nutrition transition, shifting consumption patterns towards greater dietary diversity as well as increasing child overweight and adult obesity

- Jordan saw a large increase in overweight children under five, reaching 9.5% in 2022 (higher than Morocco but lower than Egypt and Tunisia).
- Obesity among adults in Jordan increased, reaching 38.5% in 2022, and projections indicate increase will continue through 2035.
- Cereals contribute over 50% of dietary energy intake in the region, though only 33% in Jordan (there seems to be an issues with the data in Jordan, especially when we look at per capita).



Source: FAO. 2023

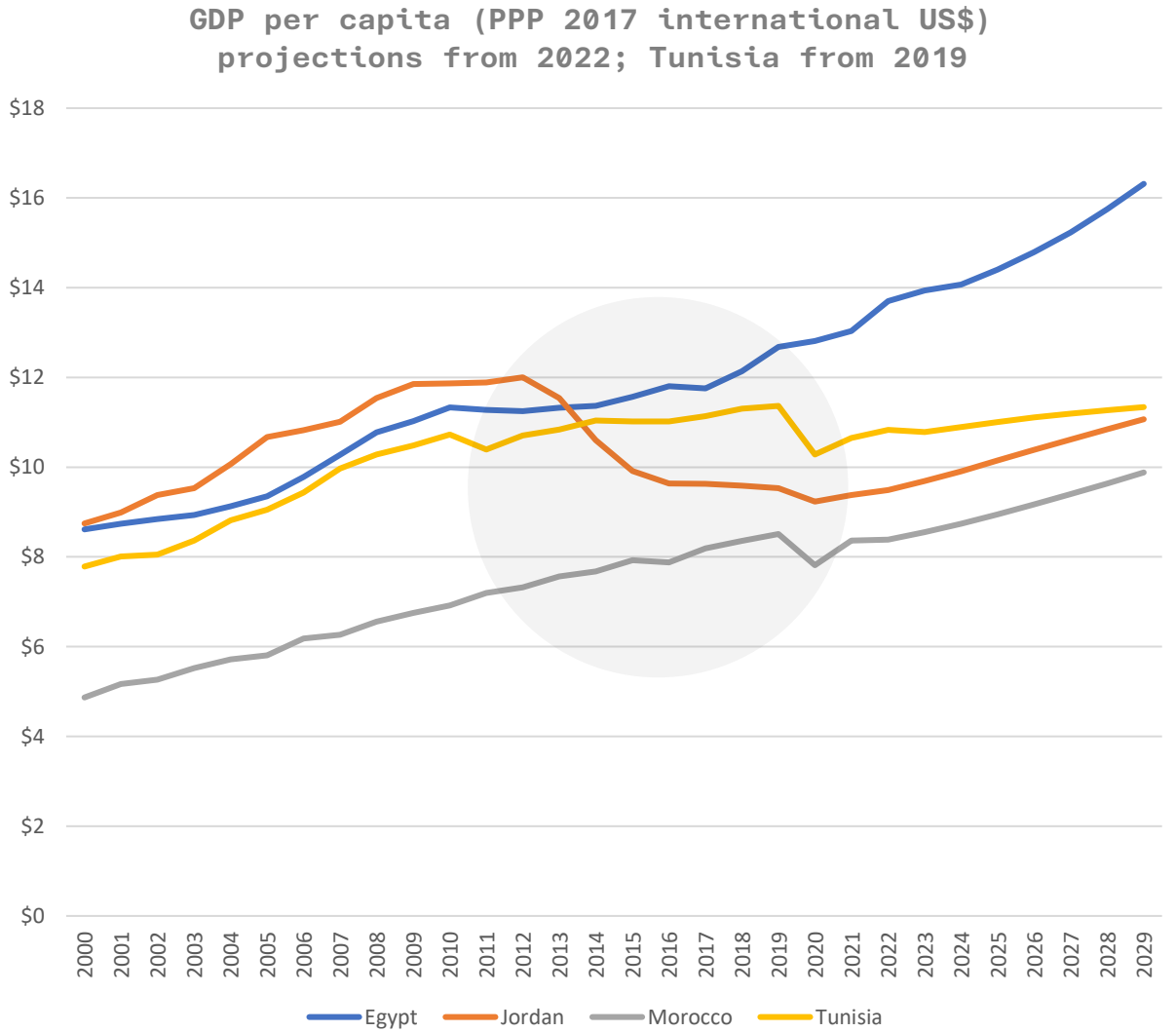
Jordan has experienced reduced economic growth per capita since 2012, though GDP is projected to grow over the next few years

Although poverty is decreasing in Jordan, 24% of the population lived below the national poverty line in 2022, a rate higher than in Morocco and Tunisia.

Jordan has the highest fertility rate and population growth among the four countries, largely due to the influx of refugees.

Jordan is highly urbanized, with only 8% of the population living in rural areas. This urban-rural distribution significantly influences food security and agricultural productivity.

Jordan's social protection system covers a broad set of programs, from cash transfers to tax exemptions, benefiting a significant portion of the population, including refugees. However, subsidies and lifestyle changes, such as increased fast food consumption, have contributed to the rise in unhealthy diets



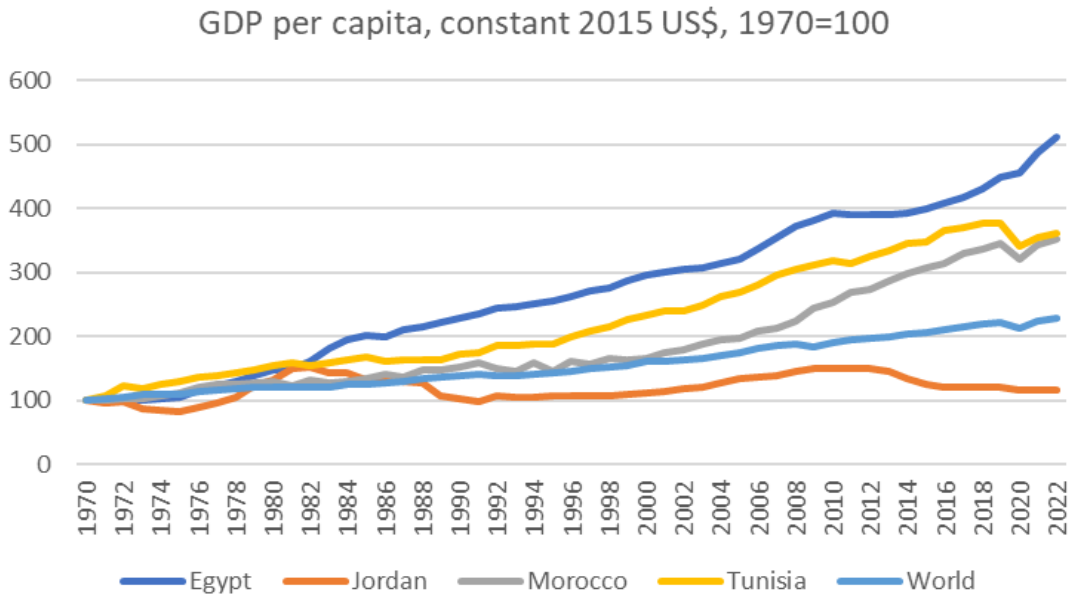
Source: International Monetary Fund, 2024

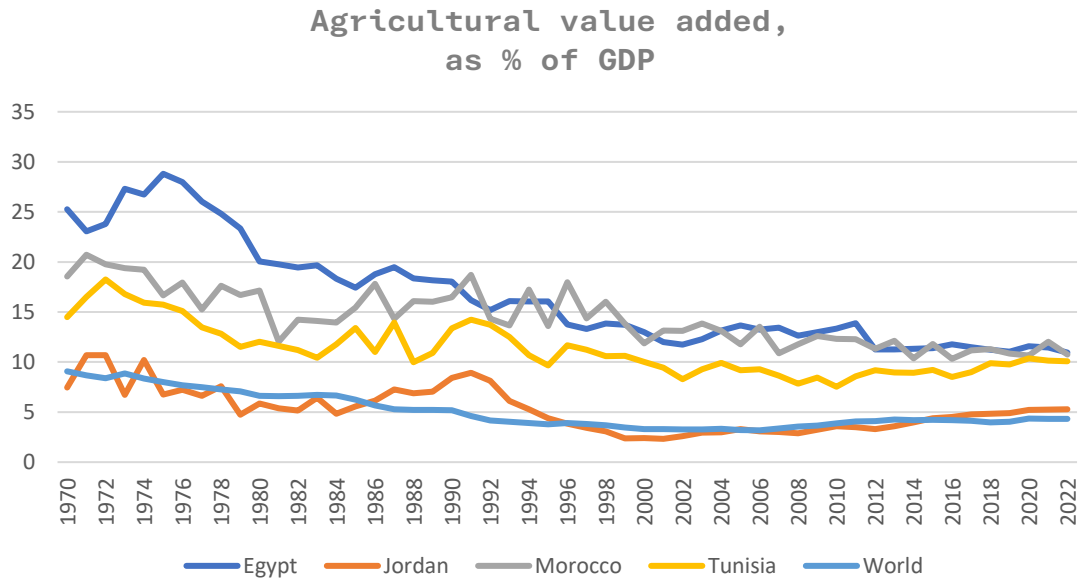
Economic trends in Jordan: GDP per capita growth and agriculture's contribution to GDP

Since 1970, GDP per capita in Jordan has grown at slower rate than world average and other SEMED countries.

Agriculture's contribution to GDP has grown over the last 20 years as the growth rate of agriculture has been faster than the rest of the economy.

Agriculture contributes approx 5% to total GDP, similar to the World average and lower than other countries than the region.

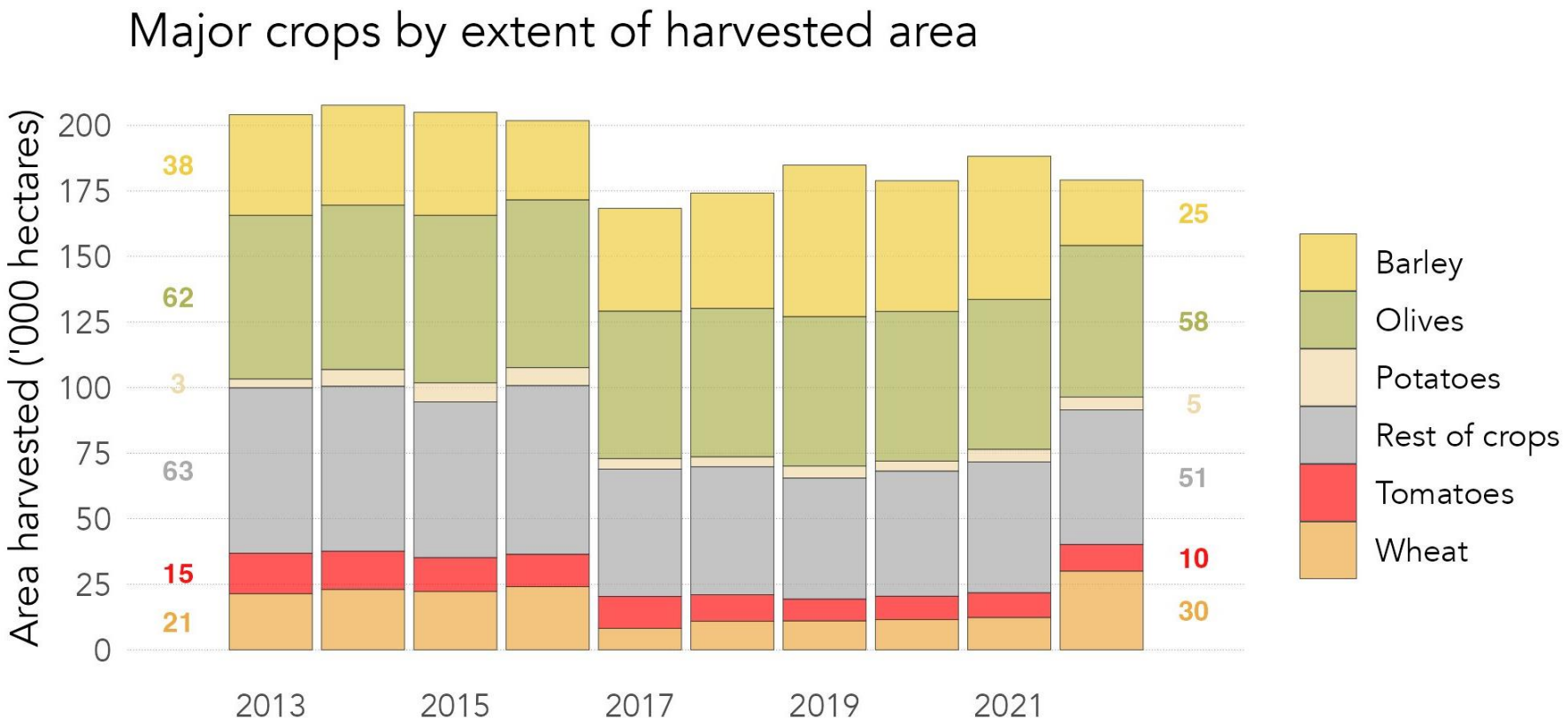




Source: FAOSTAT,2024

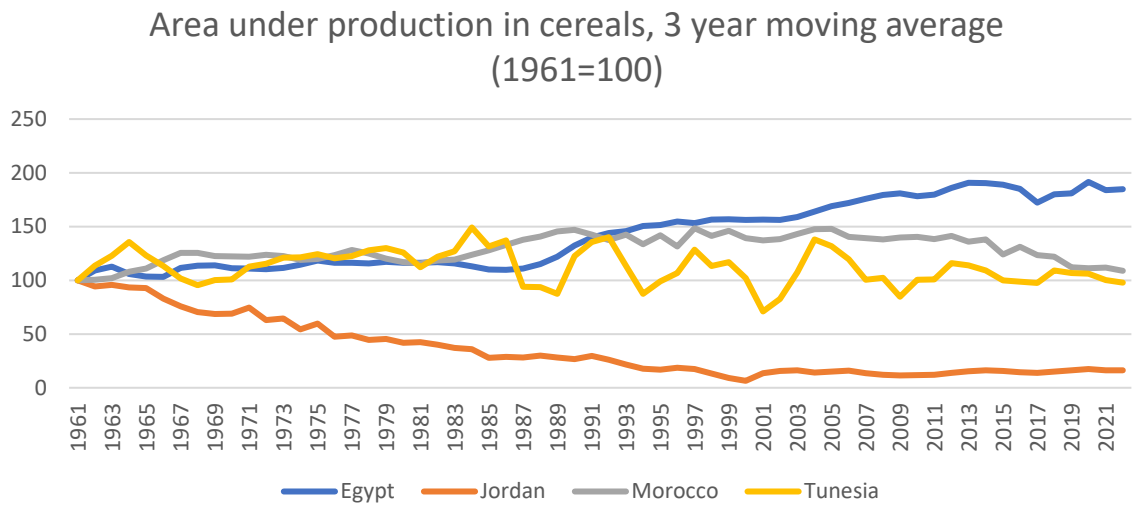
Main crops in Jordan

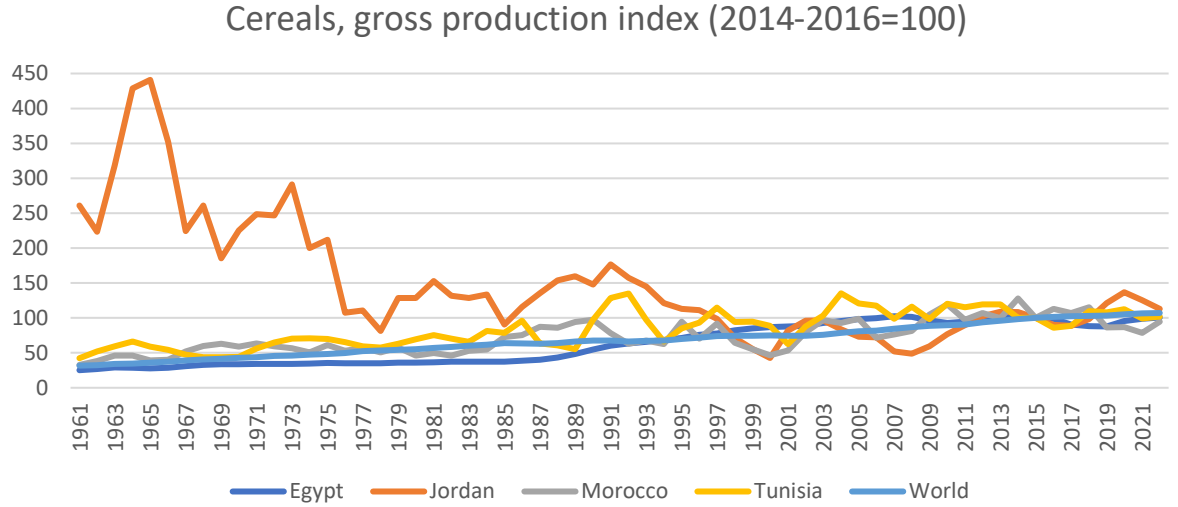
Olives
Wheat
Barley
Tomatoes
Potatoes and
Dates



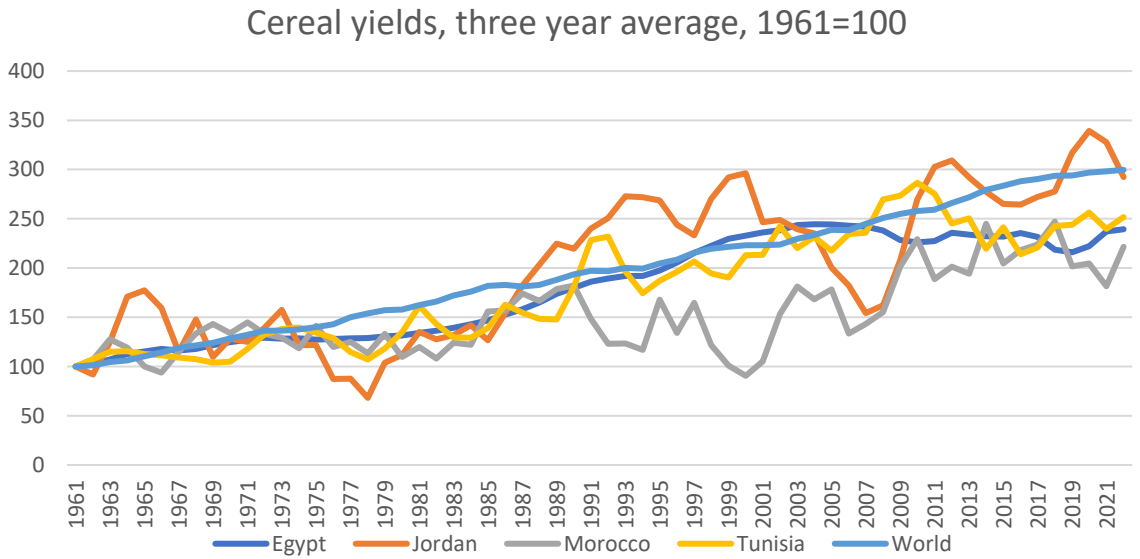
Source: FAOSTAT

Trends in cereal production in Jordan





Source: FAOSTAT,2024

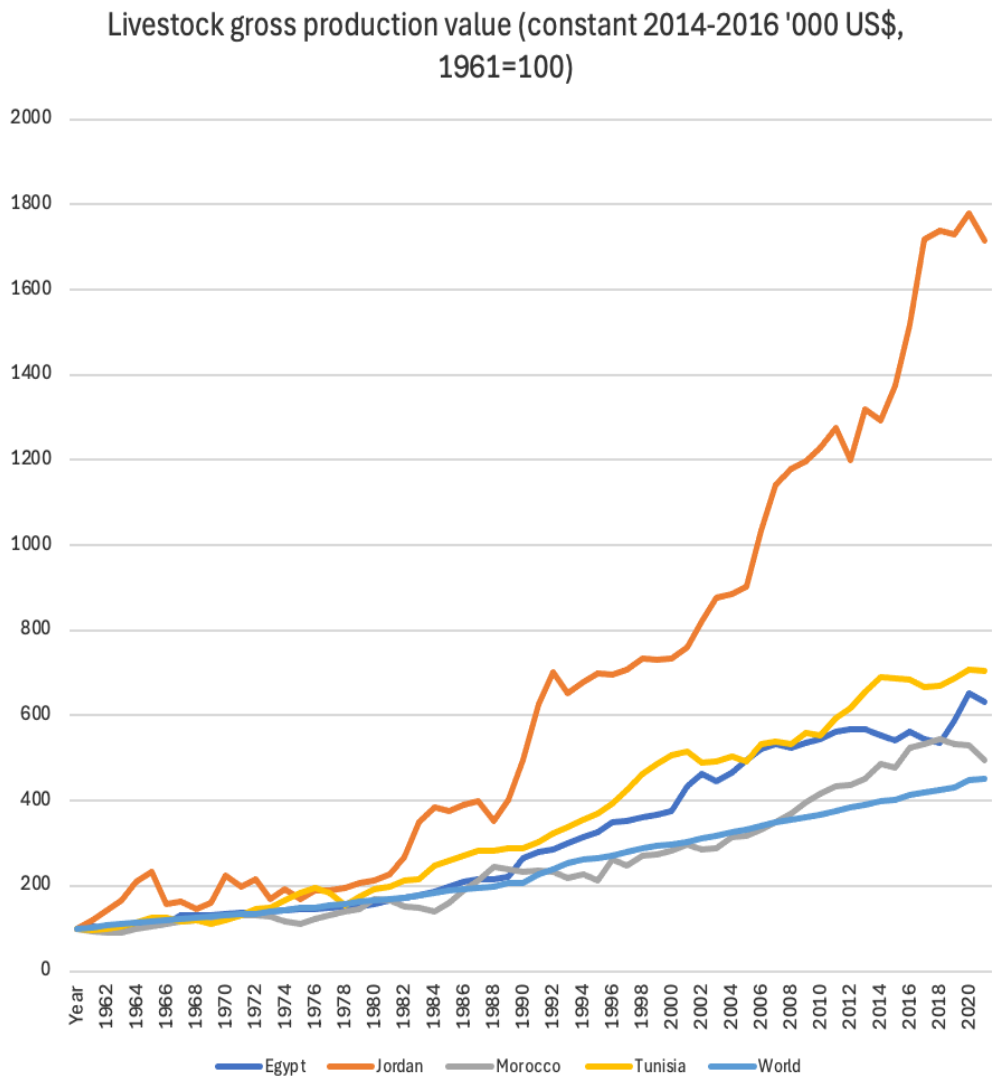


Yields increase did not compensate for the sharp reduction in harvested area, leading to overall reduction in cereal output.

Wheat self sufficiency is 3%

Assessing the contribution of Jordan's livestock sector to economy and food supply

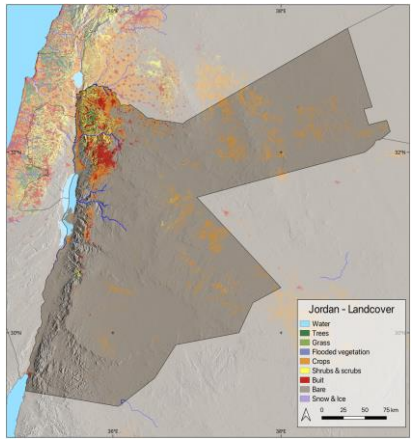
- Livestock, contributing 38% to agricultural GDP, plays a vital role in Jordan, particularly in sheep and goats, as well as poultry and dairy. Livestock production has increased at a faster rate than globally and the SEMED regions, although the sector faces challenges, such as from climate change.
- The food processing industry is growing, driving demand for ingredients and retail food sectors, which are expected to expand by 3-5% in coming years. Agrifood value chains in Jordan face numerous barriers, including weak infrastructure, poor governance, reliance on imports, and inefficient storage and distribution.
- The private sector faces obstacles such as regulatory ambiguity, limited access to skilled labor and resources, and compliance challenges. SMEs struggle with unfair value distribution and market access issues.
- Jordan's agrifood policies, including strategic reserves and inconsistent sectoral policies, have lacked coherence across administrations. The Economic Recovery Plan (2021-2023) and establishment of a Regional Food Hub as part of Jordan’s modernization vision aim to strengthen food security and agribusiness growth.

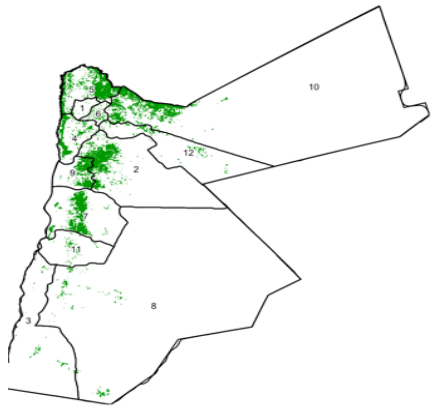


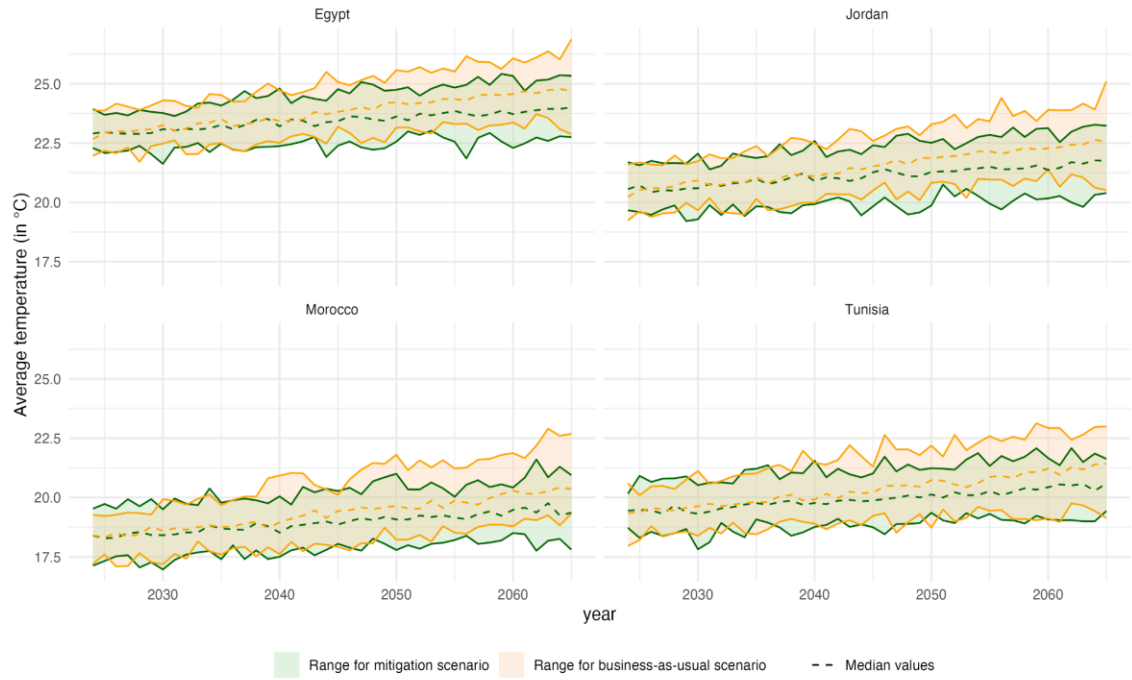
Source: FAO, 2024

Land use, climate vulnerability, and critical water scarcity in Jordan

- Desert makes up more than 90% of land cover
- Croplands cover 5.2% of total land area in Jordan
- Jordan's arid climate and recurrent droughts make it vulnerable to climate change, which is expected to cause rising temperatures, reduced rainfall, and increased evapotranspiration, threatening agricultural productivity.
- Jordan faces extreme water scarcity as water availability per capita is alarmingly low, falling below threshold of 500 m3 per capita per year.
- While water resources remain constant, Jordan stands out for low and decreasingly available renewable water resources per capita over last 40 years.
- Agriculture is the primary consumer of water, with agricultural water withdrawal accounting for 50% of total water use, and 43% of agricultural land is irrigated.







Climate change is projected to decrease yield growth for fruit and vegetables, while increasing yield growth for barley and wheat, through 2040

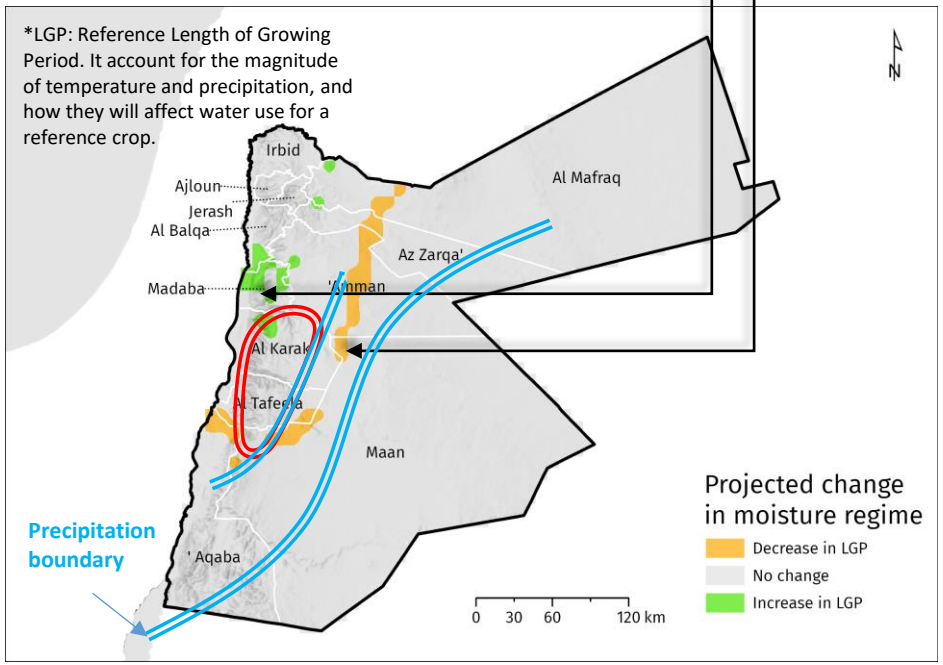
Potential implication for crop production under climate change

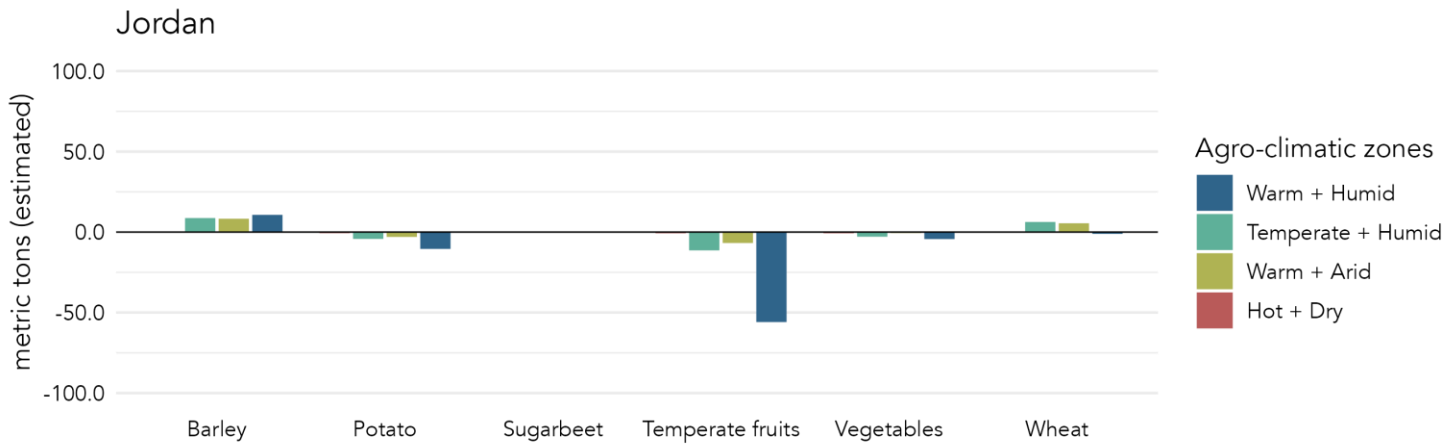
Warmer climates projected (would reduce yields for areas with low rainfall)

Some positive effects of warming conditions (Increase in growing season in areas previously too cold for farming)

Where warming conditions would reduce farming suitability

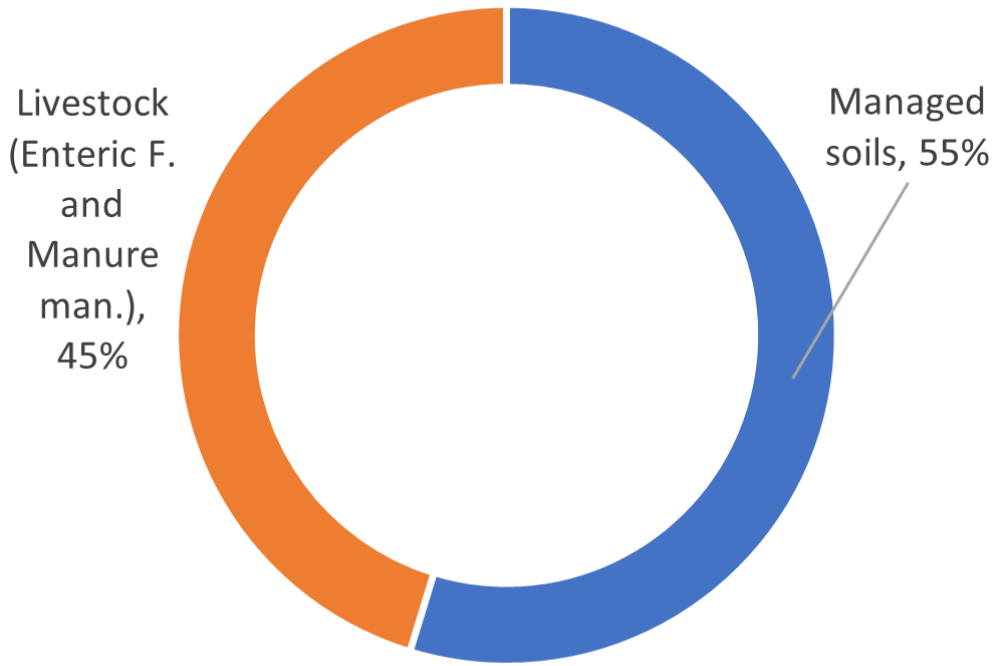
	Jordan
Wheat	+ 2.6%
Potato	- 1.7%
Barley	+ 7%
Vegetables	- 1.5%
Temperate fruit	-13%
Sugarbeet	n/a





Jordan's agricultural emissions and National Climate Commitments (NDCs)

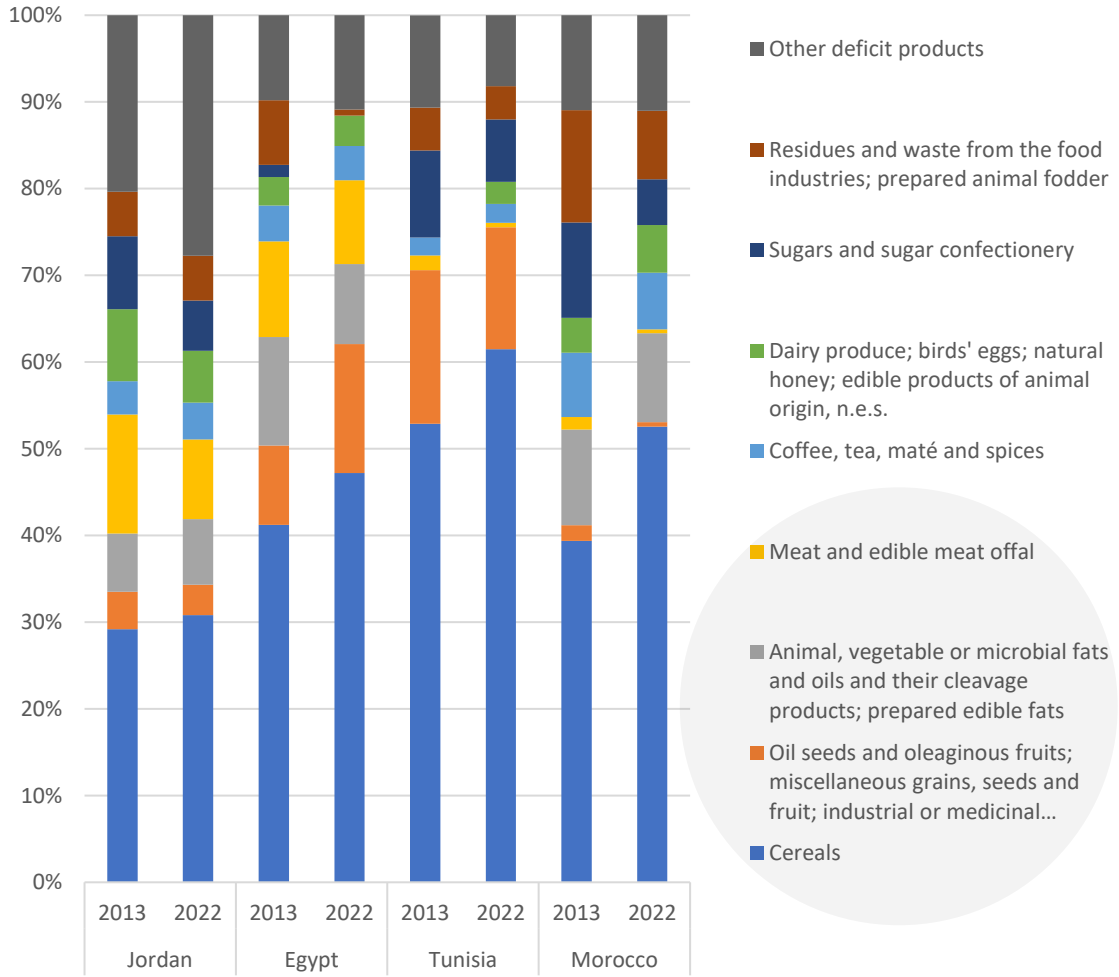
- Agriculture contributes 4% to Jordan's total emissions, with overall per capita emissions below the global average. Emissions are primarily from enteric fermentation and managed soils.
- Jordan's NDCs highlight agriculture as a priority sector. The country aims to reduce emissions along the food value chain, in particular for processing and irrigation.
- Jordan's commitment to decarbonization and resilience investments is estimated at 2.8% of GDP, with significant challenges to implement NDCs including economic and financial constraints, limited knowledge, technical challenges, and institutional obstacles.



Sources: Latest National Communications to the UNFCCC

Jordan's agricultural trade exports and unrealized market

Composition of agricultural trade deficit in SEMED countries, 2013 and 2022.

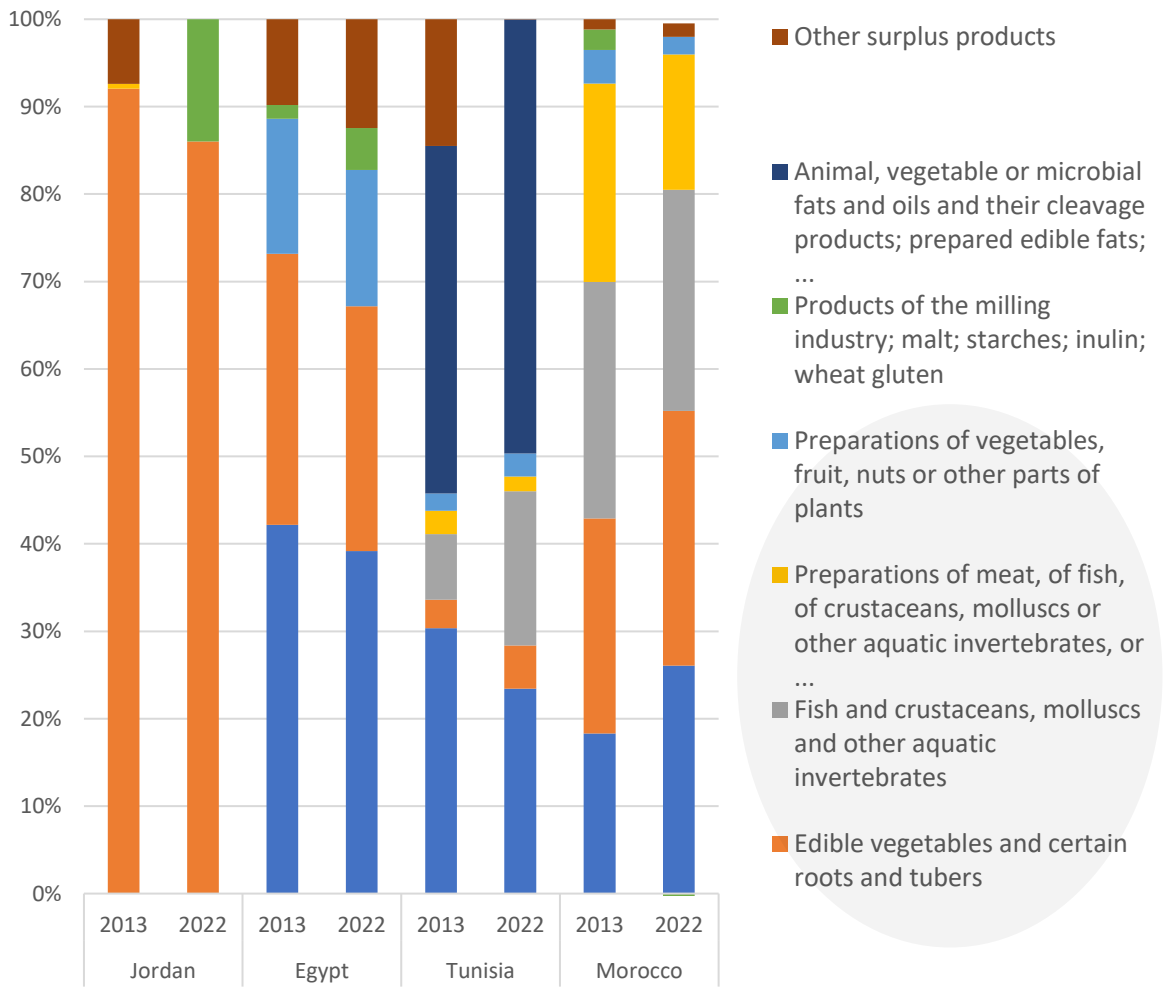


Source: International Trade Center (ITC). 2023. *Trade map*. https://www.trademap.org/Index.aspx

- Agri-trade in Jordan has stagnated, with agri-trade deficit 7% of GDP, the highest among the four countries – and increasing.
- Cereal imports drive the agrifood trade deficit in SEMED countries, with cereals accounting for 52% of the deficit in 2022. Jordan's cereal deficit increased to 31%. Other major import-dependent products include meat, offal, animal and vegetable fats/oils, dairy, sugar, edible preparations, and live animals.
- Jordan’s food import dependency in calorie terms remains high at 96%, with cereals being the most import-dependent product. Daily per capita calorie supply from cereals in Jordan has nearly halved since 2012.
- Jordan experiences significant food loss during imports, including 4% of cereals and 2% of oil crops due to poor handling.
- Jordan applies lower average import tariffs than other SEMED countries reinforcing its diverse sourcing of fruits, vegetables, fats, and proteins for the domestic market. Non-tariff measures such as sanitary and phytosanitary standards are common in Jordan, similar to other SEMED countries.

Jordan's agri-trade deficit and food import dependency

Composition of agricultural trade surplus in SEMED countries, 2013 and 2022 (excluding agri-inputs)



Source: International Trade Center (ITC). 2023. *Trade map*. https://www.trademap.org/Index.aspx

- Jordan primarily exports vegetables such as tomatoes, but lacks significant fruit or nut exports, unlike other SEMED countries. Jordan's agricultural exports are concentrated on non-SEMED GAFTA countries.
- Agricultural inputs, particularly fertilizers, make up 8% of Jordan's trade. Fertilizer exports, mainly potassium, are a significant source of foreign currency, offsetting 53% of Jordan's total agricultural trade deficit in 2022. Agri-machinery trade has improved by 26% from 2013 to 2022.
- Jordan has unrealized export potential, especially in fertilizers, live sheep, tomatoes, and dates, with opportunities to increase exports to China, India, Indonesia, Malaysia and Saudi Arabia.

Policies strategic direction

- Jordan must strategically build agricultural resilience by developing water-efficient production technologies that address climate change challenges.
- Transforming Jordan's agricultural knowledge infrastructure requires a fundamental redesign of extension services.
- Systematically improves product quality, establishes rigorous certification processes, meets international sanitary standards, and strategically positions our agricultural products – particularly in export markets.
- Comprehensive investments in post-production infrastructure, workforce skill development, and value chain optimization.

Thank you

Areej Jafari
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Irena Mnatsakanyan
Steve Goss