Chapter 24

MIDDLE EAST AND NORTH AFRICA

Sikandra Kurdi, Ganna Hassan, Nina Jovanovic, and Linda Steinhuebel-Rasheed

Sikandra Kurdi is country program leader for Egypt and a research fellow, Development Strategies and Governance Unit (DSG), IFPRI-Egypt; **Ganna Hassan** is research assistant, DSG, IFPRI-Cairo; **Nina Jovanovic** is an associate research fellow, DSG, IFPRI-Egypt; and **Linda Steinhuebel-Rasheed** is a research fellow, DSG, IFPRI-Egypt.

Food and agricultural policy in the Middle East and North Africa (MENA) region has oscillated over the past 50 years between prioritizing efficiency and economic growth, on the one hand, and ensuring national security through food self-sufficiency and broad-based provision of staple commodities, on the other. This chapter summarizes the historical trends in policies and outcomes as the region moved from heavy state interference to a period of liberalization. We look first at agricultural production and related policies and then at consumers and food and nutrition policy, and conclude with a look at emerging policy issues and research priorities.

Agricultural policy

1970s–1980s: Quest for self-sufficiency

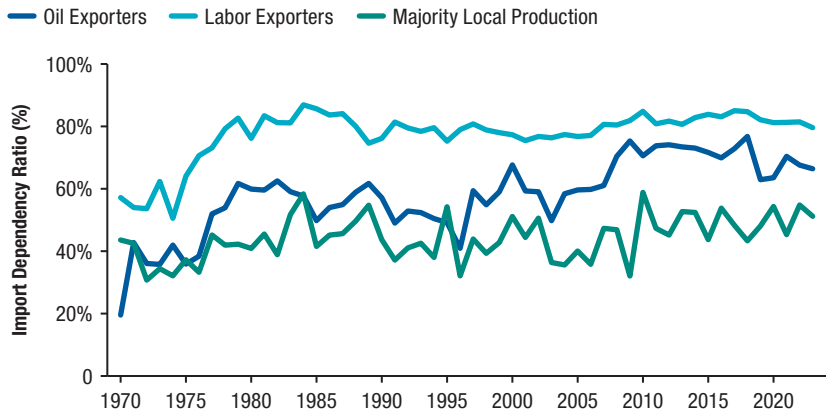
The MENA region as a whole is scarce in arable land and water resources. Most MENA countries exceed ecologically sustainable rates of freshwater use and all countries except Iraq are below the absolute water scarcity threshold for renewable water resources (de Waal et al. 2023). As a result, countries in the region depend heavily on food imports, though the degree of import dependence has varied over time, driven by changing policies and external trends.

For analysis of this period, we follow a categorization from an early IFPRI report (Khalid 1984) that groups MENA countries as oil exporters, labor exporters, and those largely reliant on their own production. Figure 24.1 shows

that import dependence in wheat has been high since the 1970s for oil-exporting countries, which benefited from foreign exchange earnings during the oil boom of the 1960s and 1970s, and also for a group of neighboring labor-exporting countries that were indirectly affected as the oil-exporting countries drew in labor from around the region. In Egypt, Jordan, Lebanon, and Yemen, remittances earned by labor migrants to the Gulf states and Libya replaced agricultural production as the main source of income in rural areas. Higher incomes in turn shifted consumption patterns, with imported wheat preferred over traditional local crops of barley, sorghum, and millet. At the same time, higher incomes in both oil-exporting and labor-exporting countries drove demand for meat and animal feed, increasing total grain consumption (Khalid 1984).

The increasing reliance on imports across the region led to government worries about potential vulnerability to external shocks. Thus, agricultural policies were designed to prioritize domestic production of strategic crops such as staple grains. Arab socialism, the leading ideology in the most populous Arab countries in the 1970s and 1980s, inspired agricultural policies that emphasized centralized planning. In Egypt, for example, farmers were given specific crop planting requirements and delivery quotas, with prices fixed separately for farmers and for consumers to promote production while keeping food prices low (Cassing et al. 2009). Subsidies were introduced for fertilizers and other inputs as well as tariffs to protect domestic livestock production.

FIGURE 24.1 Average wheat import dependency ratio by country group, 1970–2023



Source: FAOSTAT 2025.

Note: Oil exporters are Algeria, Iraq, Libya, Oman, and Saudi Arabia; Labor exporters are Egypt, Jordan, Lebanon, and Yemen. Majority local production countries are Morocco, Sudan, Syrian Arab Republic, and Tunisia.

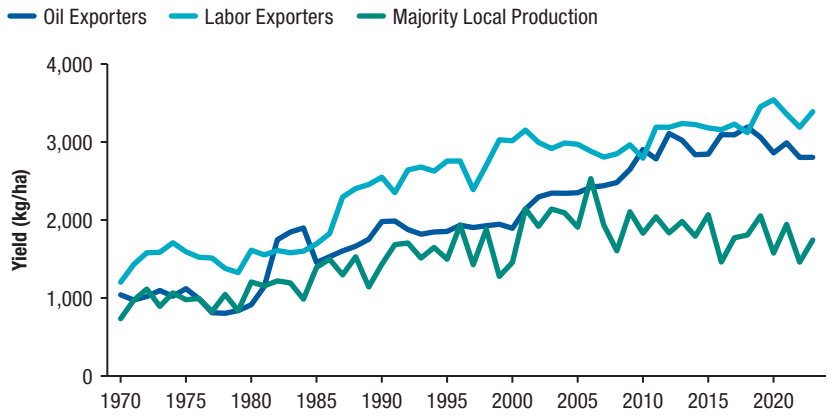
In spite of this prioritization of agriculture, agricultural productivity growth remained low. The emphasis on centralized planning led to inefficient use of existing resources (Adams 1993), while constraints on arable land and water and a rapidly growing population made self-sufficiency goals difficult to achieve. Self-sufficiency in cereals dropped from 83 percent in 1970 to only 60 percent in 1980 (von Braun and de Haen 1983).

1990s–2000s: Limited liberalization

Global geopolitical shifts and declining oil prices in the late 1980s and 1990s created fiscal pressures and impetus for liberalization of agricultural policies. Liberalization led to a more efficient allocation of resources and higher overall production, though countries remained far from achieving self-sufficiency in key commodities.

In Egypt, for example, two rounds of agriculture and trade policy reforms included reductions of input subsidies and removal of area restrictions and price controls on most major crops (Ender and Holtzman 2003). But studies found that these reforms had only limited impact on production of key commodities: while the government's low procurement prices under centralized planning had penalized wheat producers, the agriculture sector as a whole had received net protection from trade restrictions; liberalization of trade thus diluted the impacts of agricultural reform (Hazell et al 1995).

FIGURE 24.2 Average wheat yield by country group, 1970–2023



Source: FAOSTAT 2025.

Note: Oil exports are Algeria, Iraq, Libya, Oman, and Saudi Arabia; Labor exporters are Egypt, Jordan, Lebanon, and Yemen. Majority local production countries are Morocco, Sudan, Syrian Arab Republic, and Tunisia.

For wheat specifically, the liberalization of prices for suppliers was beneficial for production and self-sufficiency increased from 21 percent in 1986 to 47 percent in 1996, as the area planted doubled and yields increased (Kherallah et al. 2000). Surveys of wheat farmers showed their support for the reform process overall but also provided evidence of the high costs of self-sufficiency in wheat. Because only a minority of Egyptian wheat farmers are net sellers, the supply elasticity of wheat is low (that is, there is little production increase as prices rise) and further gains in self-sufficiency were unlikely to be achieved through government policy (Kherallah et al. 2000).

Figure 24.2 shows that the increase in wheat yields achieved across the region in the late 1980s and 1990s, especially in labor-exporting countries, leveled off around 2000. Correspondingly, as seen in Figure 24.1, import dependence declined slightly in the 1980s and early 1990s but far from enough to reverse the previous trend. Liberalization was also tempered by security concerns, as most countries maintained some direct price controls to ensure low prices for consumers (Minot et al. 2010; Nin-Pratt 2018).

In contrast to liberalization in pricing and input markets, the state continued to interfere heavily in water allocation, providing high subsidies for water used in agriculture and addressing water management as a problem of increasing supply rather than improving allocation efficiency (Hazell et al. 1995). Economists have repeatedly pointed to theory and modeling results showing the potential gains from more efficient water allocation. For example, modeling the impacts of water price reform in Morocco showed significant potential productivity gains from more efficient sectoral allocation of water resources (Löfgren et al. 1997). However, such recommendations have consistently run into political economy challenges. In contrast, central governments find it easier to invest in large water infrastructure, which provides a visible and politically valuable achievement (de Waal 2023).

2010s–2020s: Slow growth, vulnerability, and the Arab Spring

The limitations of the liberalization policies of the 1990s and early 2000s became clear in the 2011 Arab Spring uprisings. While long-term economic stagnation was a major driver of the uprisings, high food prices were also among the specific grievances voiced (Malik 2013). Economic growth rates had been low in the 2000s, and while there were gains in agricultural productivity, there was little accompanying reduction in poverty (Breisinger et al. 2012). In highly import-dependent, non-oil-exporting countries such as Yemen, poverty had increased sharply prior to the uprisings as a result of the 2007–2008 world food price crisis, while satisfaction with living standards

had decreased in Egypt and Libya (Breisinger et al. 2011). The failures of agricultural policy were also directly implicated in the unrest in Syria, where a major drought from 2006 to 2010 followed a period of policies that prioritized groundwater extraction for cotton cultivation, shifting the country from being a net exporter of wheat to a net importer and displacing thousands of farmers (Souffiantini 2020).

In 2020, the Russia–Ukraine war and disruptions in exports from the Black Sea region caused another sharp increase in global wheat, fertilizer, and oil prices, with particularly severe impacts in MENA countries reliant on imports from the region. Like the previous shock, the 2020 crisis was most severe for import-dependent, non-oil exporters, in particular Egypt, Sudan, and Yemen, since oil and food prices increased together. While immediate policy responses focused on how to cope with high consumer prices, MENA countries have also been discussing renewed attempts to increase domestic agricultural production (Abay et al. 2022).

In sum, while agricultural liberalization in the MENA region resulted in improvements in input efficiency and modest gains in self-sufficiency, its overall impact was constrained by persistent institutional challenges and resource constraints, particularly water scarcity.

Food subsidies, social protection, and nutrition

1970s–2000s: High spending on food subsidies

To ensure access to staple foods in the MENA region, safety net systems have historically centered around food subsidies (Sdralevich et al. 2013). Although the subsidies are largely untargeted and inefficient, the system protects the poorest households from global price fluctuations and guarantees stable access to subsidized staple foods that make up a meaningful share of their consumption (Pinstrup-Anderson and Alderman 1988).

Egypt's ration card system is the largest food subsidy program in the region, covering more than three-quarters of the Egyptian population. Costs have been high, peaking at 10 percent of the state budget in the 1970s, and for decades, the system has been criticized for poor targeting even as the political economy incentives for subsidies have been recognized (Ahmed and Bouis 2002; Alderman 1987). Although attempts at direct reform in this period were met with strong political opposition, several rounds of cuts in the ration card rolls and reductions in the quantities of subsidized food did lower program costs (Abdallah and Al-Shawarby 2017). Regionally, in spite of limited

reforms pushed during the liberalization period, subsidy spending was above average levels in the 2000s, ranging from 8 to 14 percent of gross domestic product (GDP) in MENA countries (Breisinger et al. 2012).

Beyond the fiscal burdens of national subsidy systems (exemplified by Egypt's ration card system), these subsidies have been criticized for promoting overconsumption of staple foods. Due to cultural norms, dietary patterns, and access to subsidized foods, MENA accounts for most of the countries worldwide with the highest shares of female overweight and obesity. An IFPRI study showed that Egypt's food subsidies made it easier for recipients to afford a low-diversity diet, thus contributing to malnutrition among children and mothers in beneficiary households (Ecker et al. 2016). Likewise in Egypt and Jordan, government spending on subsidies was correlated with larger increases in bodyweight (Abay et al. 2020).

2010s–2020s: Emergence of cash transfer programs

Since the Arab Spring, there has been a surge of new cash-based social protection systems in MENA, following the example of Latin America's conditional cash transfer programs. These cash-based programs, which provide poor households with regular direct payments that they are free to use as they prefer, have been shown to be cost effective and provide significant benefits for household consumption, in particular allowing for increased consumption of more nutritious food items (Breisinger et al. 2018; Kurdi 2021; Salti et al. 2022; Schwab 2020)(see Chapter 11). Some prominent cash-based programs are Egypt's Takaful, Jordan's program of the same name Takaful, Morocco's Tayssir, and Tunisia's National Program for Needy Families (Auktor and Loewe 2021; Rodriquez and Wai-Poi 2024; Thyen and Karadag 2021). This programming was further expanded as part of the COVID-19 response, in which MENA countries spent an average of 1.1 percent of GDP on social protection (Almenfi et al. 2020). Improvements in data systems and the introduction of proxy means tests have also allowed for more accurate targeting of poor households compared to the older subsidy systems (Breisinger et al. 2024).

Even in fragile and conflict-affected contexts in the MENA region, such as Sudan, Yemen, and refugee communities in Lebanon, a shift from in-kind food distribution to cash has been promoted as an approach that is more nutrition sensitive, less distortionary, and less costly to implement (see Chapters 11 and 13). Just prior to the ongoing civil war, Sudan launched a cash-based program called the Thamarat Family Support program (Breisinger et al. 2023), and in Yemen, the Cash for Nutrition program has been rolled out nationally and continues to function. Cash-based programming provided

by humanitarian actors is also expanding in the region to meet needs in fragile settings, and these efforts are developing linkages with national social protection systems (Smith 2020).

At the same time, the political economy of food subsidies continues to be a major factor shaping policies. In the context of high inflation, households continue to prefer in-kind transfers over equivalently valued cash (Abay et al. 2023). In Egypt, for example, after discussing a plan to completely replace subsidies with cash in 2024, the government has so far refrained from making any policy changes.

Emerging research areas and looking forward

Looking toward the future, rigorous research to inform policy is particularly important in the following areas in the MENA region:

Food security in fragile settings. Ongoing conflicts and protracted fragility in Gaza, Iraq, Lebanon, Libya, Sudan, Syria, and Yemen have created significant hotspots for global food insecurity and hunger. Better evidence is needed on the impact of both agricultural and social protection interventions that can feasibly support food security in fragile and conflict-affected settings to inform international responses at the humanitarian-peace-development nexus (see Chapter 13) (Al Daccache et al. 2024; Hirvonen and Leight 2024; Lind 2022).

Climate-resilient agricultural systems. Projected increases in temperature and climatic variability in the MENA region will require adaptation in management practices. Anticipatory action is an emerging paradigm for climate crisis preparedness built around early warning and triggered funding mechanisms for mitigation, but research is needed to guide both public and private insurance investments in this area (de Brauw and Bloom 2024) (see Chapter 10). Farmers can also take direct actions to adopt new climate-smart practices. Research focused on understanding farmers' digital access, knowledge gaps, risk preferences, and other factors that determine behavior can facilitate interventions to promote broader adoption of climate adaptation measures (see Chapters 4, 5, 9, and 17) (Tabe-Ojong et al. 2024).

Resource governance. The water-energy-food-environment nexus emphasizes the need for agricultural innovations that perform positively across all four dimensions of sustainability (Bhaduri et al. 2015; Elsayed 2023). For example, solar-powered irrigation is linked to improved agricultural efficiency and productivity gains (Closas and Rap 2017; Ziadat and Sultan 2011). However, recent rapid expansion also poses big risks,

particularly the accelerated depletion of nonrenewable groundwater resources (Balasubramanya et al. 2024). Remote-sensing and machine-learning tools can help to map the scope of solar irrigation adoption, while research on cooperative behavior, water pricing models that incorporate political economy constraints, and functioning of existing resource governance institutions can inform institutional development aimed at sustainable water governance (see Chapter 5).

Promotion of healthy diets. Given the increasing burden of obesity and noncommunicable diseases, understanding how to motivate healthier food choices is also a key area of emerging research. Across the region, initiatives such as education, labeling, and price interventions have been explored, but rigorous evidence on effectiveness of these efforts in shaping consumer dietary choices is limited (Al-Jawaldeh et al 2022). Nutrition-sensitive school feeding, which is less developed in the MENA region than other places but has strong community support, could also contribute to this agenda (Bliznashka et al 2024) (see Chapter 12).

Social protection for economic inclusion. While the expansion of cash transfer programs in MENA is an efficient way to protect consumption of the poorest, sustained poverty reduction is a greater challenge. Policy guidance and evaluations of social protection approaches that emphasize economic inclusion are needed (see Chapter 11). In the MENA region, the persistently low labor force participation rate for women is a particular concern for poverty reduction, so economic inclusion programming must also take into account social and legal barriers that exist to women's participation in formal sector work (see Chapter 14) (El-Enbaby et al. 2024; Assaad et al. 2020; Ridao-Cano 2023).

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