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Deterioration of Food (In)security in the South Mediterranean and MENA Region in Times of Covid-19

by Dilek Gürsel

1. Summary

This brief focuses on food insecurity in the Middle East and North Africa (MENA) region, with specific examples from the South Mediterranean (Maghreb, Mashreq) countries, and on how it is aggravating during a global shock such as the Covid-19 pandemic. It examines the socioeconomic situation on the ground and proposes recommendations to absorb crucial negative impact resulting from consequences on the agricultural sector and advocates for the development of systems that can generate enhanced regional food-sufficiency.

2. Introduction

[The Covid-19 pandemic] “will confront MENA countries with both a negative supply shock and a negative demand shock”[1]. According to the latest World Bank Economic Update for the Middle East and North Africa, the region is suffering from considerable reduction in labor activity due to containment measures as well as disruptions in input supplies to production due to the disruption of global value chains; in return, the demand for regional economic services and outputs such as tourism and oil are decreasing. The latter are particularly crucial for the economies of selected MENA countries where the situation has, as anticipated[2], been deteriorating.

Meanwhile, “freedom from hunger and malnutrition” was declared a basic human right in the 1948 Universal Declaration of Human Rights[3]. “Zero Hunger” is Goal 2 of the Sustainable Development Goals (SDGs), designed by the United Nations General Assembly in 2015 as part of the Agenda 2030 to achieve a better and more sustainable future. The aim is to reduce malnutrition, stop the expected increase of the number of people facing food insecurity (if food production is not increased by 50% by 2050, 2 billion out of 10 billion globally will be food insecure[4]) and develop a more sustainable, people-centered approach to agriculture in order to limit the further worsening of the climate crisis (Goal 13). Additionally, and consequently, the goal of Zero Hunger is evidently linked to ending poverty (Goal 1), good health (Goal 3), gender equality (Goal 5), decent work and economic growth (Goal 8), consumption and production patterns (Goal 12), desertification and land degradation (Goal 15), peace (Goal 16) and partnerships (Goal 17), highlighting the relevance of eradicating hunger [5].

The current COVID-19 pandemic is a public health crisis with economic, social and societal impacts: according to World Bank predictions, the global economy will shrink by 5.2% this year and is not projected to recover in 2021[6]. The report further estimates that MENA economies will decrease by also 5.2%, meaning they will not be as hit as big industrial countries, however will still be more impacted than other regions [7]. If the predictions materialize, this would represent the deepest recession since the Second World War with even more economies being affected[8].

Especially in the global south, consequences will be multi-layered as the unfolding of COVID-19 already threatens to aggravate existing vulnerabilities. The fight against hunger is one of such vulnerabilities. As COVID-19 presents a major shock and unforeseen disruption to all areas of life, its implications for global trade are worrying. According to FAO, the pandemic presents a “looming food crisis” . Domestic production is insufficient and lockdown measures slow it down further; consequently, not only is production at risk, but further shortages due to supply chain disruptions will strain the populations. This will have direct effects on societal peace, political instability and economic fragility in the region. Due to high levels of informal labor in the region, with no social and legal protection, estimations foresee that an additional 8.3 million people will fall into poverty. The most devastating consequences are expected for the most vulnerable groups, such as migrant workers and refugees[9].

This policy brief addresses the direct implications that the COVID-19 pandemic has on food (in)security in the MENA region, and the South Mediterranean countries sub-group, and assesses recommendations for actions to be taken immediately and in the long run, such as employment generation, expansion of social benefits to all groups and investment into agricultural technology development, in order to make the region more resilient to future shocks and mitigate the current crisis’ implications.

3. Food (In)Security and Societal Stability

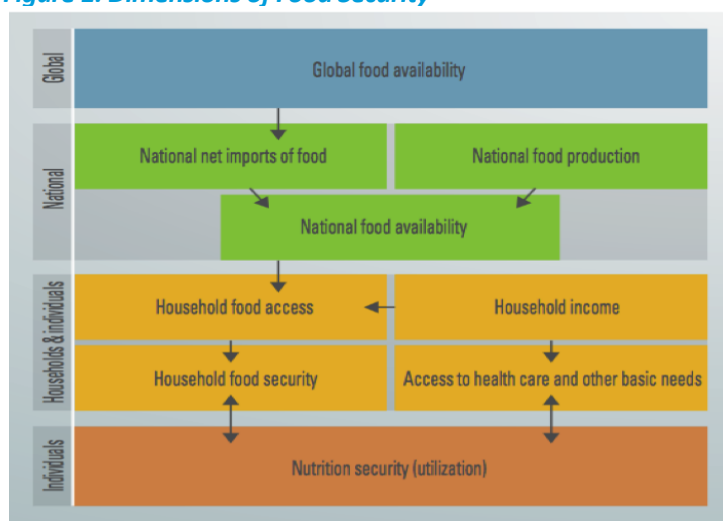
Food security, as defined at the 1996 World Food Summit, “[...] exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”[10]. A food crisis, on the contrary, is an “acute food insecurity, which requires urgent food, nutrition, and livelihoods assistance for survival”[11].

The concept of food security includes different layers, from global to national to household and individual. On the national level, food availability is a sum of imports and domestic food production.

On the household level, food access is defined by this national food availability as well as household income. The following figure visualizes these relationships.

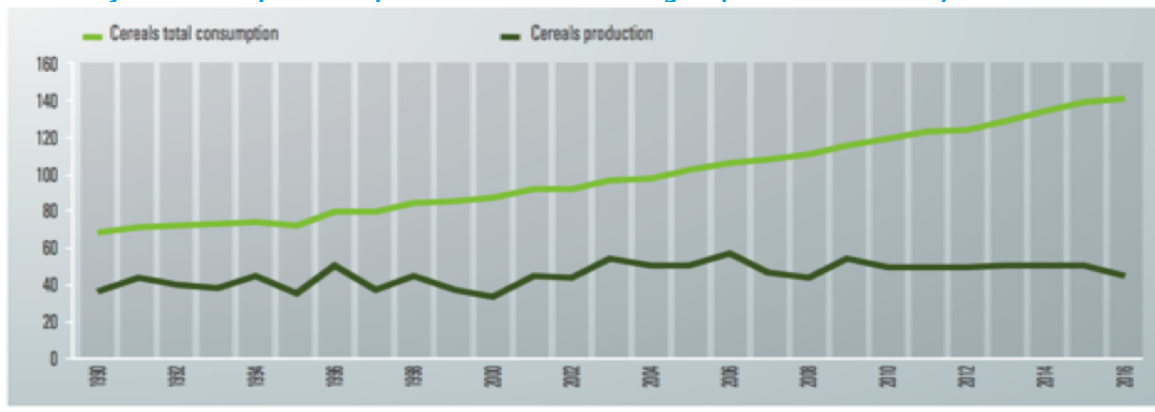
The national level is of particular interest, as many Arab countries can only guarantee food security by depending on the world market, meaning that food imports are crucial. Therefore, any shocks or disruptions of supply chains can have immediate negative impacts on populations. In the past, weather conditions caused vulnerabilities with regards to production and availability, therefore increasing market prices. Debates about these limitations to food access started to be more emphasized during political upheavals in several

Figure 1. Dimensions of Food Security



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Figure 2. Trends in food consumption and production in the Arab region (million metric tons)



Source: FAOSTAT. Available from <http://www.fao.org/faostat/en/#home> (accessed April 2017).

Arab countries in the last decade, asking to revise food security strategies and questioning post-colonial dependency and demanding ‘food sovereignty’[12].

The agricultural sector in the MENA region provides 38% of the region’s active labor force with employment and income. It is the key sector contributing to food security. However, in no country of the region has the sector been self-sufficient for domestic supply. All countries depend on food imports, for the access to which the economic activity of the aforementioned labor force is crucial. Its economic activity generates the contributions necessary to import.

According to the World Food Programme (WFP), food insecurity could double until the end of this year, from 135 Mio people across 55 countries (43 Mio of which live in the Middle East and Asia[13]) at the beginning of 2020 to 265 by the end of it. In many vulnerable regions, the COVID-19 pandemic adds to other existing threats to food security, such as protracted conflicts, recurrent droughts or also the worst locust infestation in decades[14]. The region faced 3 of the worst food crises in 2019 which are also continuing into 2020, those of Yemen, Syria and Iraq, therefore COVID-19 has placed an extra burden on already existing dire humanitarian situations and low health capacities[15].

Over the region, lockdowns and unemployment of groups in the informal sector have led to an increased dependency on humanitarian assistance, particularly concerning those living in off camp settings who rather tend to be excluded from external assistance. Lockdowns lead to difficulties accessing or affording food; for instance, Palestinians already faced socio-economic challenges pre-pandemic, and many depend on day labor (which is a general trend in the region, especially amongst the socio-economically weaker groups, migrants, refugees etc.), and curfew and movement restrictions translate into zero salary. In the case of Palestinians, many of them did not have access to food assistance by UNRWA[16]. Therefore, the Palestinian Authority tried to contain the scope of expected food insecurity through distributing seedlings to 30.000 households in the West Bank to encourage them to grow their own food in the spaces available to them around their houses. This has aimed to make families more food self-sufficient for basic ingredients, and the former challenge of lack of water has not been a limit due to the nature of the seedlings which are rain-fed and therefore require minimum water[17].

As the Food and Agriculture Organization of the UN (FAO) states, rural populations are especially employed in the sector. However, vulnerable groups such as women (see table on the right) or migrants or refugees make up the majority[18], the prior not having secured land tenure rights in most cases, the latter often employed informally with no access to social protection. Most evident, but not restricted to, is the case of the over 6 Mio Syrian refugees in South Mediterranean countries such as Jordan, Lebanon and Turkey who, in absence of official documentation or clear status, lack access to formal employment and social security and are dependent on informal em-

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Table 1. Employment in agriculture in selected countries, 2013 (percentage)

Country	Percentage of total employment	Male	Female	Percentage of total male employment	Percentage of total female employment
Algeria	10.6	9.8	0.8	12	4.4
Egypt	28	19.2	8.8	24	43
Iraq	23.4	13.9	9.5	17	51
Morocco	39.2	23.6	15.6	32	60
State of Palestine	10.5	7.1	3.4	8.5	21
Syrian Arab Republic (2011)	13.2	11.7	1.5	13.4	12.3

Source: Data compiled from FAOSTAT, available from <http://www.fao.org/faostat/en/#data/OE>; and World Bank, World Development Indicators, available from <http://data.worldbank.org/data-catalog/world-development-indicators> (accessed April 2017).

ployment, thus being particularly hit by lockdowns and decrease in economic activity. The situation is similar for the over 11 Mio displaced throughout the Mashreq. Therefore, their access to food subsidies is also not ensured, placing them at greater risk of livelihood disruption in the case of shocks[19]. This has been visible in a brutal manner with the eruption of COVID-19 and enforced lockdowns; labor intensive sectors

such as agriculture were the first to be hit, and the informal workforce the first to be discontinued. With no access to relief assistance which is usually reserved to citizens, undocumented persons are at an increasing risk as long as lockdowns continue.

Countries in the Southern Mediterranean were fast in reacting to the arrival of COVID-19 on their territories. Lockdowns were introduced rapidly in the neighborhood: education institutions were fast to close, in Lebanon as early as in the 29th of February; total lockdown was announced 15 March, by when the whole country had basically shut down. Around the same time, similar measures were introduced in other South Mediterranean countries. After loosening the measures over the summer, most were back to partial lockdowns, curfews and restrictions in public places such as a limitation to the number of people outside of one's household.

As COVID-19 is a global pandemic, similar developments have unfolded in all regions of the world, having striking implications for the region's food imports. Domestic supply does not meet needs and consequently, prices are spiking. Jordan, for instance, could not import flour from Russia, rice from India or other ingredients fundamental to its basic foods such as bulgur, wheat and legumes from Egypt which led to price increases. Currently, food prices are 3.3% higher than in October 2019[20]. In Turkey, they went up by even 10% by April and this has not gone back to pre-pandemic figures[21]. The lockdown measures are already aggravating social tensions, so it is a matter of time that social unrest will increase due to food access problems.

With economic activity coming to a halt, the purchasing power of a majority of people has decreased. **Shortages in agricultural inputs** (such as fertilizers, seeds and pesticides) due to labor and supply shortages, are not expected to increase domestic agricultural output and shall **further decrease food production**. Additionally, pre-pandemic economic stagnations, such as in the case of Turkey[22], coupled with ongoing political crises, such as in Lebanon, do not provide the basis for long-term contingency plans to absorb the negative multi-level impacts the pandemic is having on the countries.

"We risk a looming food crisis unless measures are taken fast to protect the most vulnerable, keep global food supply chains alive and mitigate the pandemic's impacts across the food system"[23]

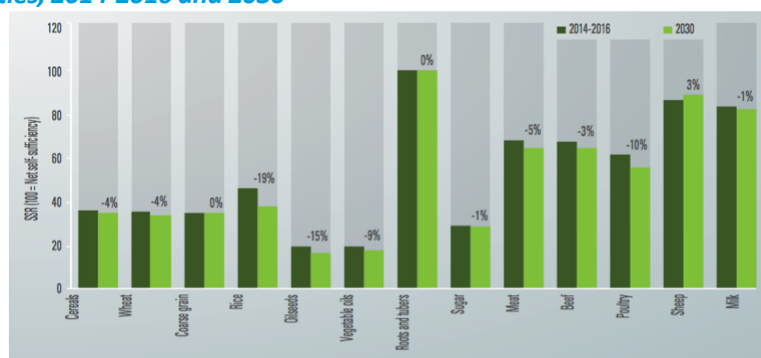
The **disruption of global supply chains is going to further complicate the situation for countries that are already vulnerable due to conflict**, such as war-torn Syria and Yemen, or politically instable, such as the Palestinian Authority, Iraq and Lebanon, but also economically tarnished Turkey, just to name some. The example of Lebanon shows how political instability and the financial crisis can have a tremendous effect on the scale of food security: the decrease of foreign currency reserves since October 2019 led to banks limiting access to these. Coupled with this economic downturn the Lebanese pound depreciated by 78%. This has led to food prices increasing, with inflation expected to increase by more than 50% in 2020 (2.9% in 2019). Food prices have already increased by 141% in July 2020 compared to July 2019. Lebanon imports basic ingredients such

as 85% of its consumed wheat, next to flour. The Beirut Port Explosion added another burden to the country as its storages for imported goods have been widely destroyed. Coming together with the pandemic, revenues through remittances from abroad dropped as well, not helping the stability of prices. Together with this, the cost for production increased by more than 50% and challenge farmers' ability to pay for the costs for agricultural inputs (which rose by 400%) in cash, resulting in a reduction of agricultural land under production by over 30% in the winter of 2020/21[24].

Globally, the MENA region is the largest importer of cereals and a large importer of poultry and airy products. The trend observed during the last months has been overbuying wheat as a precaution against social unrest (e.g. Egypt and Iran). Regarding the availability of vegetables, it already has some degree of self-sufficiency, particularly Egypt, Turkey and Morocco which are exporters of legumes[25]. This has led to negative coping mechanisms, particularly amongst more vulnerable groups such as migrant workers and refugees, e.g. reduction of meals to one per day. Further, prioritizing certain members of the family such as working men or children has also shown more strains on women. The additional limitation to very basic foods over a long term aggravates negative health impacts. Only those receiving remittances from abroad seem to have been able to cope better; food insecurity further triggers new displacements as well as spontaneous returns, for instance of Syrian refugees back to their home communities in Syria if there is relative stability as prices tend to be more affordable despite the worsening economic situation, compared to their host communities in the neighboring countries[26].

The **decreasing levels of food supply sufficiency are not new trends**: regional specificities such as above-average population growth, insufficient physical capacity to grow agricultural yields in response to current needs, water scarcity and conflicts over water control have already posed great challenges to the introduction of tailored policies.

Figure 3. Self-sufficiency ratios in the Arab region, selected commodities, 2014-2016 and 2030



Source: Projections by FAO and OECD using the Aglink-Cosimo projections model.

4. Conclusion

The COVID-19 pandemic is continuing to challenge the global system. Being the most unequal region globally, the existing inequalities in MENA, and in the sub-group of South Mediterranean countries, will be exacerbated and the most vulnerable particularly will suffer disproportionately from the socioeconomic impacts. Due to violent conflicts, persistent political instabilities and economic crises that mark the region, the capacities to react and implement measures to absorb the devastating consequences of the outbreak are limited. The lack of an economic margin particularly restrains targeted responses in the agricultural sector. It will be an immense challenge to bolster domestic production and become food-sufficient in the next months on the way to recovery. Another aspect that will need close observation is the development of internal movements. In the past, food insecurity has led to rural-urban migration due to lack of agricultural inputs (e.g. water for irrigation), therefore showing that, first of all, rural livelihoods are at risk of being more endangered, and secondly, the pressure on cities will grow. The burden on a region that is already marked by internal displacement and refugees will intensify, but also risks increasing levels of infection due to overcrowded urban spaces, cramped camp settings and unprepared authorities. An extreme example of how this can play out is the Syrian conflict, which was preceded by a drought that reduced the gross domestic product (GDP) by 8 per cent in four years (17 per cent by 2010). Unemployment and increasingly populated cities with insufficient livelihoods provisions have been the main drivers of the nine year-long conflict [27].

Reflecting on the above, there are key challenges that governments need to start addressing as soon as possible. In a more medium- to long-term approach, domestic agricultural output and achievement of food-sufficiency should be envisaged, mainly through technological investments and sustainable farming methods. In crisis-response, interventions need to target employment, stabilize neighborly and regional relations, and ensure domestic social cohesion and gender equality. The next part will discuss some key recommendations.

5. Implications and Recommendations

All countries in the MENA region need to take compelling measures to not only respond to the current COVID-19 crisis, but to also recreate their windows of opportunities in order to challenge the unfavorable projections for 2030 which already foresee that food-sufficiency will further decrease and systematic problems get bogged down rather than diminish.

Technological innovation for more sustainable farming methods can respond to a disruptive crisis like this pandemic that challenges global supply chains and burdens regions with high import dependency in the food sector. New methods need to take into consideration water scarcity in the MENA region. Compared to the Gulf countries, the Southern Mediterranean countries are not as strained with this as strongly, however water is increasingly becoming a diminishing resource. Since the 1970, the MENA region is not able to grow food from its own domestic water resources; after trying unsustainable approaches to combatting water scarcity such as the failed approach of mining of fossil water by Saudi Arabia and the United Arab Emirates in response to the world food crisis of 1972 – 1975, it is more than crucial for the region to develop sustainable approaches to water scarcity[28].

Another strategy applied by Gulf countries has been to secure access to food production abroad through the purchase of farmlands in countries such as Sudan or Ethiopia which are food insecure themselves, yet ready to take financial inflows from the rich Gulf countries, further marginalizing their own populations. This is not sustainable and does not combat food insecurity on a wider regional and global scale, also it is not a viable method for the less economically strong Southern Mediterranean countries[29].

Investing in farmers and farming methods needs to find high resonance on political agendas. The food sector combines economy, human security and development on a more day-to-day scale, meaning that prioritizing innovation will lead to increasing outputs faster than in other fields such as health or education (to which it is also linked). There are some successful examples of this, such as in Algeria in the early 2000s. The country introduced a National Agricultural Development Plan that sought to connect the rural with the urban through enhanced infrastructure (roads and irrigation systems) and electrification. This was later complemented by a focus on diversification of agricultural production and decentralization. This led to farmers being more included in decision making processes, to the national strategy to emphasize machine provision and to the creation of an agricultural disaster fund. This helped stabilize the agricultural growth rate to around 4% per year in the early 2000s[30].

Responses to the current crisis need to be humanitarian: livelihoods are in danger or already destroyed, therefore the focus needs to be on the most vulnerable. Currently, job and income security are not given for many people, therefore, crisis response should look into extending benefits to those that have an informal status or were undertaking informal employment. An average of 68% in the region is filled by this form of employment, directly making clear that in most countries the majority of the population does not have access to any social benefits or health provisions. This endangers populations as a whole as those without access are more in danger to contract the virus and spread it, and particularly when resources become scarce for individuals or families, they will seek to access basic needs. Further, a gender lens needs to be applied as the majority of employment in the agricultural sector are women (see figure p. 3); a shock such as COVID-19 therefore aggravates their income guarantee and places them at risk of poverty; further, as discussed elsewhere, the rise of gender-based violence regardless of employment situation is worrying.

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Refugees and migrants are at great risk to fall into poverty and hunger. Extending social protection to those groups is necessary, however, could eventually cause social unrest in societies that are already conflict-tense. In this sense, the Portuguese government's action to treat migrants which are among the most vulnerable as citizens in order to provide them access to (health) services is a hopeful example, however, has not been followed by countries that are economically stronger than Portugal, and therefore might pose a limited chance for MENA countries. Particularly when considering the ratio of migrants and refugees in selected South Mediterranean countries (Lebanon and Jordan) or their number (Turkey), this will not be perceived as favorable by governments and societies. However, neglecting this bears the potential to lead to highly precarious conditions due to densely populated camps with already weak sanitary and social access. Rather, new policies targeting the acceleration of procedures for official papers need to be higher on the political agendas and shall enable vulnerable groups to access formal employment and social protection. Access to formal employment will generate tax revenues, stabilize families and thus benefit economies overall.

In order to be better prepared for future shocks and to mitigate economic and provision consequences, **discussions on how to become more self-sufficient in food production are crucial.** This might not necessarily guarantee that in a similar sanitary crisis no jobs would be lost, however, it might guarantee less stress on food availability, access and price-volatility. South Mediterranean countries need to invest in technologically innovative means to farmland. Efficiency in crop production with high- resource efficient methods and higher water productivity through integrated water management concepts need to be proposed. There are already existing methods worldwide, such as in Australia's Sun Drop Farms which grow vegetables using desalinated water through solar energy, therefore utilizing sustainable, energy-friendly methods to achieve positive output in the given arid context[31].

To better respond to climate change challenges, **sustainable innovative technologies need to enhance the use of water, soil and crop quality.** Evidence from Israel shows that those countries in the region that use irrigation rather than rain-fed systems are more productive and use their water more efficiently. Through investing in innovative research around water scarcity, irrigation systems and training farmers in farming technologies, Israel has become a regional and global leader in innovation and agricultural output where the resources are not favorably dispersed. Further development of drainage technology in order to use drainage water responds to the challenges of water scarcity. Among South Mediterranean countries, Egypt is a world leader in drainage technology and uses drainage water on 90% of the irrigated land in its territory[32]. However, any interventions focusing on irrigation systems are cost-intensive due to ensuring adequate infrastructures and know-how and capacity-building on how to most efficiently farm. Nevertheless, filling the gaps of technology could eventually also reduce food loss in production or transportation. In order to develop better technologies, the private sector needs to have more access points, and therefore governments need to ease their influence on the public sphere; eventually, this could attract foreign direct investment necessary to contribute to financing the proposed recommendations.

The analysis of other contexts of water scarcity also show that it is sometimes more an issue of lack of management and infrastructure than a lack of innovative technologies[33]. Nevertheless, these will be important to achieve sustainable farming and agricultural production, and as the implications of climate change and the environment challenge the region, cooperation through investing in common research would be a first step to tackle issues that require a global solution.

It is proven that **the main challenge is actually not food availability, but rather access to food and the management of value chains.** Food diplomacy which ensures the proper functioning of existing multilateral frameworks would be a crucial first step requiring transparency from official sides. A World Bank report highlighted the need for enhanced data collection, analysis, access and adequacy to tailor policy making better. For the time being, the aim is to keep global food supply chains alive, reconsider regional short-route trade options and identify possibilities to include non-state actors in a more coordinated way.

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COVID-19 MED BRIEFS

CMI-FEMISE "COVID-19 MED BRIEFS"

The recent coronavirus crisis threatens the health, economies and societies of all countries, regardless of level of development. In the South Mediterranean countries the fight against the pandemic is even more complicated. It must be done with limited health and economic resources compared to other regions. In addition, it takes place in a unique social and geopolitical context.

Cooperation and EU-Med strategies in key sectors are needed. Therefore, CMI and FEMISE have decided to join forces and launch this series of Policy Briefs to pave the way for thematic analyses and prescriptions, which will be explored throughout this series.



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